

AD-A064 521 FLEET WEATHER CENTRAL/JOINT TYPHOON WARNING CENTER FP--ETC. F/G 4/2
TROPICAL CYCLONE CENTER FIX DATA FOR THE 1975 TYPHOON SEASON. (U)
NOV 76

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JTWC 76-5

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TROPICAL CYCLONE CENTER
FIX DATA FOR THE 1975 TYPHOON
SEASON

by

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NOVEMBER 1976

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(6) TROPICAL CYCLONE CENTER FIX
DATA FOR THE 1975 TYPHOON SEASON.

(9) Technical note.

BY

(12) 4 pp.

STAFF OF THE JOINT TYPHOON WARNING CENTER

(11) NOV ~~1976~~ 76

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ABSTRACT

A computer print-out of all center fix data is displayed for each tropical cyclone occurring in the western North Pacific, the Arabian Sea and the Bay of Bengal during 1975.

INTRODUCTION

During the 1975 typhoon season, 1857 fixes from various reconnaissance platforms were received at the Fleet Weather Central/Joint Typhoon Warning Center, Guam. Of these, 217 (11.7%) were obtained from aircraft, 444 (23.9%) from land radar, 2 (.1%) from aircraft radar, 965 (52.0%) from DMSP satellite and 229 (12.3%) from NOAA-4 satellite. A discussion of the various reconnaissance platforms is presented in Chapter II of the 1975 Annual Typhoon Report.

FORMAT

This fix data print-out is presented in calendar order for the 25 Western Pacific tropical cyclones and the 6 North Indian Ocean tropical cyclones. For all types of fixes, the first four columns list the same information in the following format:

FIX NO. - Fixes are numbered sequentially.

TIME - Day, hour and minutes (Zulu time) of fix.

POSIT - Position of storm center in degrees and tenths.

FIXCAT - Type of fix used (SAT - satellite, P - aircraft penetration, LRDR - land radar, AC R - aircraft radar, SRDR - ship radar, CPA - station experiencing eye passage, SCF - synoptic chart fix).

The format of the remainder of the print-out varies with the type of fix.

A. SATELLITE - The primary satellite fix data was obtained from USAF DMSP¹ sites at Nimitz Hill, Guam; Kadena AB, Okinawa; Yokota AB, Japan; Clark AB, Philippines; Nankon Phanom AB, Thailand²; and the Air Force Global Weather Central at Offutt AFB, Nebraska. Additional fix data was obtained from FLEWEAFAC Suitland, MD and from the National Environmental Satellite Service (NESS), Suitland, MD both of which utilized NOAA-4 data. Intensity estimates and trends (when available) are listed as derived from the Dovrak technique (NOAA TM,

¹ Defense Meteorological Satellite Program

² The site at Nakon Phanom AB, Thailand was deactivated and re-established at Clark AB, Philippines during 26 Aug-26 Sep 1975.

TABLE 1. POSITION CODE NUMBERS (PCN)

<u>PCN</u>	<u>METHOD OF CENTER DETERMINATION/GRIDDING</u>	<u>RADIUS OF 90% PROBABILITY AREA (NM)</u>
1	Eye/Geography	25
2	Eye/Ephemeris	25
3	Well Defined CC/Geography	40
4	Well Defined CC/Ephemeris	40
5	Poorly Defined CC/Geography	55
6	Poorly Defined CC/Ephemeris	55

CC=CIRCULATION CENTER

TABLE 2. Confidence (CONF) numbers as a function of Dvorak T Number and radius of 90% probability area (nm).

<u>TROPICAL CYCLONE INTENSITY</u>	<u>CONF (1)</u>	<u>CONF (2)</u>	<u>CONF (3)</u>
T1.5	60	120	170
T2.0	60	120	170
T2.5	60	120	170
T3.0	50	100	150
T3.5	45	90	140
T4.0	45	90	140
T4.5	45	90	140
T5.0	40	90	130
T5.5	40	80	130
T6.0	40	80	130
T6.5	30	70	120
T7.0	30	70	120
T7.5	30	60	100
T8.0	30	60	100

NESS-45). If the source was DMSP data, the Position Code Number (PCN) (See Table 1) appears followed by the acronym DMSP. If the source was NOAA-4 data, then NOAA-4 appears followed by the acronym CONF and the confidence number (see Table 2). Fixes based on infrared data are annotated by the acronym IR DATA.

B. RADAR - The latitude and longitude of the radar site is given in the POSIT OF RADAR column. If available, plain language remarks regarding tropical cyclone characteristics, size and accuracy of fix appear after AC & W and military radar reports. All other land radar contain (if available) a 5-digit code group identical to the WMO radar code for reporting tropical cyclone characteristics with regard to size, development and accuracy of location of the center or eye.

C. AIRCRAFT PENETRATION - This data is normally obtained at scheduled fix times. Intermittent aircraft fixes are sometimes made during peripheral data gathering legs between scheduled fixes. These intermittent fixes normally provide date, time and position data only.

The categories of aircraft reconnaissance information are as follows:

1. ACCRY (Accuracy): The estimated navigation (first number) and meteorological (second number) accuracies are expressed in nautical miles.

2. FIX LVL (Fix level): A constant-pressure-surface flight level (listed in millibars) is normally maintained during a tropical cyclone fix mission. Low-level missions (usually 1500 feet) are conducted at a constant true altitude.

3. MAX OBS FLT LVL WIND: Wind speed (knots) at flight level is measured by the AN/APN 147 doppler radar system aboard the WC-130 aircraft. Values entered in the category represent the maximum wind measured prior to obtaining a scheduled fix. This measurement may not represent the maximum flight level wind associated with the tropical cyclone because the aircraft samples only those portions of the tropical cyclone along the flight path. In many instances the flight path may be through the weak sector of the cyclone. In areas of heavy rainfall, the doppler radar may track energy reflected from precipitation rather than the sea surface. This limitation can prevent accurate wind speed measurement. In obvious cases such erroneous wind data will not be reported.

In addition, the doppler radar system on the WC-130

restricts wind measurements to drift angles less than or equal to 27 degrees if the wind is normal to the aircraft heading.

4. MAX OBS SFC WIND: The maximum surface wind (knots) is an estimate made by the Airborne Weather Reconnaissance Officer based on sea state. As in 3 above, this observation is limited to the region of the flight path, and may not be representative of the storm as a whole. Availability of data is also dependent upon the absence of undercast conditions and the presence of adequate illumination. The position of maximum flight level wind and maximum observed surface winds do not necessarily coincide.

5. OBS MIN SLP: The minimum observed sea level pressure on a 700 mb fix level mission is obtained by applying the minimum 700 millibar height (meters) to the following regression equation:

$$\text{SLP} = .115*(700 \text{ MB HT}) + 645$$

This relationship is accurate within ± 3 mb in most cases. However, if the 700 mb center and the surface center are not vertically aligned, the minimum sea level pressure will be erroneously high. In such cases, if the surface center can be detected, the minimum sea level pressure is obtained by a dropsonde released above the surface vortex center.

If the fix is made at the 1500 feet level, the sea level pressure is extrapolated from that level.

6. MIN 700 MB HT: The minimum height of the 700 mb surface in the vortex center is recorded in decameters.

7. FLT LVL TI/TO: This category denotes the maximum temperature measured in the center (TI) and the ambient temperature outside the center (TO). The outside temperature is measured just prior to entering the wall cloud. Both temperature observations are in degrees Celsius and are made at flight level.

Reconnaissance aircraft seldom penetrate on the same azimuth from one fix to another; thus, the position of TO normally varies from the center, both in bearing and range.

8. EYE FORM/ORIENTATION/DIA: The shape and diameter (nautical miles) of the eye is determined by visual observation or by radar. This is reported only if the center is 50 per cent or more surrounded by wall cloud. For elliptical eyes, the size of both the major and minor axis are given in nautical miles. Abbreviations for the eye forms are as

follows:

CIRC - Circular

ELIP - Elliptical

CONC - Concentric

FIX DATA PRINTOUT

TYPHOON LOLA FIX POSITIONS FOR CYCLONE NO. 1 0600Z 22 JAN TO 0600Z 28 JAN																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
FIX NO.	TIME	POSIT	CAT	ACFT	FIX	FLY LVL	WIND	RNG	SFC WIND	MIN SLP	MIN PGT	FLT LVL	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF RADAR	MSR NM-H																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

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MAX UHC	MAX OBS	OBS	MIN	FLY
100	100	100	100	100

FIX POSITIONS FOR CYCLONE NO. 3
0000Z 27 JUL TO 0600Z 29 JUL

PIX NO.	TYPE	POSIT	CAT	ACQNY	PIX LVL	DIR	MAX ORS			MAX WIND			SPEC WIND	OBS MIN SLP	MIN /ODMH MGT	FLT LVL TT/TO	EYE FORM	ORIENTATION	EYE DIA	POSIT OF RADAR	RSL NMHR			
				ACC-MET			VEL	HRG	HRG	WIND	WIND	VEL										HRG	HRG	
20	270010Z	22.7N 142.0E	SAT	(11.0/23.0 / / 00S)									PCN 3	0MSP										
21	270010Z	22.7N 142.2E	P	2 20 1500	110	30	10						25 35 110		40	1001	-	25 25	-	-	-			
22	270025Z	22.7N 141.5E	SAT	(1R DATA									PCN 6	0MSP										
23	270025Z	22.8N 139.0E	SAT	(1R DATA									PCN 6	0MSP										
24	271006Z	22.4N 141.5E	SAT	(1R DATA									PCN 5	0MSP										
25	271016Z	22.5N 142.7E	SAT	(1R DATA									PCN 6	0MSP										
26	271143Z	22.7N 139.3E	SAT	(1R DATA												(CONF 02)								
27	271208Z	22.5N 141.4E	SAT	(1R DATA									PCN 5	0MSP										
28	271447Z	24.1N 140.6E	P	2 2 700	270	25	170						50	-	-	994	503	15 13	-	-	-			
29	272008Z	24.2N 140.3E	SAT	(1R DATA									PCN 6	0MSP										
30	272008Z	24.3N 141.6E	SAT	(1R DATA									PCN 6	0MSP										
31	272010Z	24.4N 139.5E	P	1 10 700	210	25	160						20	-	-	996	505	14 12	-	-	-			
32	272027Z	24.8N 139.5E	SAT	(12.0/22.5 / / 00S)									PCN 3	0MSP										
33	272028Z	24.8N 139.3E	SAT	(12.0/22.0 /S /2500S)									PCN 3	0MSP										
34	272028Z	24.7N 139.7E	SAT	(12.5/22.5 /01.5/2500S)									PCN 3	0MSP										
35	272036Z	23.2N 139.5E	SAT	(12.5/23.0 /20.5/2500S)												(CONF 01)								
36	280024Z	25.1N 130.6E	SAT	(11.0/1254 /20.5/2400S)									20	5	000	100	30 120	20	998	507	14 12	-	-	-
37	280044Z	25.0N 130.4E	P	10 5 700	180	30	120						20	5	000	100	35 40 100	997	506	15 14	-	-	-	
38	280055Z	25.5N 137.3E	P	5 15 700	150	35	40						100	35	40 100									
39	281008Z	25.6N 137.5E	SAT	(1R DATA												(CONF 01)								
40	281055Z	25.3N 137.3E	SAT	(1R DATA									PCN 6	0MSP										
41	281055Z	25.5N 137.1E	SAT	(1R DATA									PCN 6	0MSP										
42	281077Z	25.7N 136.9E	SAT	(1R DATA									PCN 6	0MSP										
43	281097Z	25.2N 137.3E	SAT	(1R DATA									PCN 5	0MSP										
44	281097Z	25.7N 136.8E	SAT	(1R DATA									PCN 6	0MSP										
45	281055Z	25.6N 135.5E	P	5 25 700	220	40	140						35	-	-	999	508	14	-	-	-	-		
46	282010Z	26.0N 134.9E	P	13 7 700	-	20	-						-	-	-	1001	509	14 13	-	-	-	-		
47	282158Z	26.4N 133.6E	SAT	(1R DATA									PCN 3	0MSP										
48	282158Z	27.0N 133.9E	SAT	(1R DATA									PCN 3	0MSP										
49	282110Z	27.0N 133.5E	SAT	(11.0/22.0 /21.0/2400S)									PCN 3	0MSP										
50	282110Z	27.0N 133.5E	SAT	(12.0/22.5 /20.5/2400S)									PCN 3	0MSP										
51	282110Z	26.4N 133.5E	SAT	(12.0/22.5 /20.5/2400S)									PCN 3	0MSP										
52	290055Z	26.9N 134.7E	SAT	(11.0/12.5 /S /2400S)									PCN 5	0MSP										
53	291002Z	26.8N 131.7E	SAT	(1R DATA									PCN 6	0MSP										
54	291140Z	26.0N 131.0E	SAT	(1R DATA												(CONF 01)								
55	292000Z	29.7N 131.1E	LDOR	- 65///																29.6N	129.5E			
56	292000Z	30.1N 130.7E	LDOR	- 55///																30.6N	131.0E			
57	292051Z	31.2N 130.8E	SAT	(11.0/12.0 /21.0/2400S)									PCN 3	0MSP										
58	292051Z	30.6N 131.0E	SAT	(11.0/22.0 /21.5/2400S)									PCN 3	0MSP										
59	292000Z	30.5N 130.6E	LDOR	-																30.6N	131.0E			
60	100000Z	30.2N 130.4E	LDOR	- 65///																30.6N	131.0E			

FIX POSITIONS FOR CYCLONE NO. 4
1200Z 31 JUL TO 0000Z 04 AUG

FIX NO.	TIME	COORD	FIX CAT	ACQRY	FIX MET	FIX LVL	MAX OBS			SFC WIND			OBS MIN SLP	MIN T/10MM	FLT LVL	EYE FORM	ORIENT-ATION	EYE DIA	POSIT OF MADAR	MSA NMHR
							DIR	VEL	HRG RNG	VEL	HRG	RNG								
1	2020102	21.2N 140.5E	SAT		(R DATA					1	PCN 5	OMSP								
2	2020102	20.2N 136.0E	SAT		(R DATA					1	PCN 3	OMSP								
3	0010312	20.6N 135.1E	SAT		(R DATA					1	PCN 6	OMSP								
4	0021367	19.3N 134.6E	SAT		(R DATA					1	PCN 5	OMSP								
5	0100142	17.9N 134.4E	SAT		(11.0/21.0 / / 005)					1	PCN 5	OMSP								
6	0100142	18.3N 134.0E	SAT		(12.0/22.0 /02.0/25005)					1	PCN 3	OMSP								
7	0100142	17.5N 134.2E	SAT		(12.0/22.0 / / 005)					1	PCN 5	OMSP								
8	0102087	17.8N 133.5E	SAT		(R DATA					1	PCN 4	OMSP								
9	0110182	18.2N 133.1E	SAT		(R DATA					1	PCN 6	OMSP								
10	0110192	17.8N 133.0E	SAT		(R DATA					1	PCN 4	OMSP								
11	0111142	18.0N 133.0E	SAT		(R DATA					1	PCN 6	OMSP								
12	0112552	17.8N 133.1E	SAT		(R DATA					1	PCN 3	OMSP								
13	0112552	17.9N 132.9E	SAT		(R DATA					1	PCN 5	OMSP								
14	0112562	17.4N 133.6E	SAT		(R DATA					1	PCN 5	OMSP								
15	0121102	18.0N 132.5E	P	5	5	700	180	36	110	122	-	-	-	985	295	16	12	-	-	-
16	0121222	18.3N 132.5E	SAT		(R DATA					1	PCN 3	OMSP								
17	0121222	17.8N 132.5E	SAT		(R DATA					1	PCN 5	OMSP								
18	0121562	18.0N 132.5E	SAT		(13.5/23.5 / / 005)					1	PCN 4	OMSP								
19	0121562	18.2N 132.4E	SAT		(13.5/23.5 /01.5/24005)					1	PCN 3	OMSP								
20	0121562	18.3N 132.5E	SAT		(13.0/23.0 /01.0/24005)					1	PCN 1	OMSP								
21	0102382	18.8N 132.1E	P	5	5	700	310	40	230	60	45	220	45	979	290	17	15	-	-	-
22	0103512	18.8N 132.1E	SAT		(13.0/23.0 /02.0/24005)					1	PCN 3	OMSP								
23	0103512	19.0N 132.2E	SAT		(13.5/23.5 / / 005)					1	PCN 3	OMSP								
24	0103512	19.0N 132.2E	SAT		(R DATA					1	PCN 3	OMSP								
25	0103512	18.9N 132.5E	SAT		(R DATA					1	PCN 3	OMSP								
26	0110072	20.9N 131.2E	SAT		(R DATA					1	PCN 2	OMSP								
27	0110072	19.9N 130.9E	SAT		(R DATA					1	PCN 2	OMSP								
28	0110072	20.9N 131.0E	SAT		(R DATA					1	PCN 2	OMSP								
29	0112062	19.8N 130.8E	SAT		(R DATA					1	PCN 3	OMSP								
30	0112062	20.2N 130.8E	SAT		(R DATA					1	PCN 5	OMSP								
31	0112062	20.5N 130.7E	SAT		(R DATA					1	PCN 3	OMSP								
32	0112062	20.9N 130.7E	SAT		(R DATA					1	PCN 5	OMSP								
33	0114372	20.6N 130.2E	P	5	5	700	200	55	140	40	-	-	-	967	283	15	15	CINC		2
34	0120302	21.6N 128.9E	P	8	5	700	30	65	310	40	-	-	-	956	271	17	12	CINC		2
35	0121382	22.1N 128.1E	SAT		(15.5/25.5 /02.0/24005)					1	PCN 3	OMSP								
36	0121382	21.8N 128.1E	SAT		(15.0/25.0 /01.5/24005)					1	PCN 1	OMSP								
37	0121382	21.8N 128.1E	SAT		(14.5/24.5 /01.5/24005)					1	PCN 1	OMSP								
38	0201322	22.1N 127.2E	SAT		(15.5/25.5 /02.5/24005)					1	PCN 1	OMSP								
39	0201322	22.1N 127.1E	SAT		(15.5/25.5 /02.0/ / 005)					1	PCN 1	OMSP								

TYPHOON NINA
FIX POSITIONS FOR CYCLONE NO. 4
1200Z 31 JUL TO 0000Z 04 AUG

FIX NO.	TIME	COORD	FIX CAT	ACQRY	FIX LVL	FLI DIR	WIND VEL	MAX OBS WIND BRG	MAX OBS SFC WIND BRG	UHS MIN SLP	MIN MGT	FLY LVL	FLY TI/TO	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF RADAR	MSN NMHR
40	020352Z	22.2N 127.1E	SAT	DIR DATA														
41	020352Z	22.2N 127.2E	SAT	DIR DATA														
42	020352Z	22.3N 127.1E	P	5	2	700	180	120	120	20	110	120	20	Y20	240	24	12	CTMC
43	020352Z	22.3N 126.8E	LRUN														26.2N 127.7E	3
44	020700Z	22.5N 126.5E	LRUN														26.3N 126.2E	
45	020700Z	22.5N 126.8E	LRUN														26.3N 125.3E	
46	020700Z	22.7N 126.2E	LRUN														26.3N 126.2E	
47	020700Z	22.8N 126.2E	LRUN														26.3N 125.3E	
48	020700Z	22.7N 126.3E	LRUN														26.2N 127.1E	
49	020700Z	22.9N 126.0E	LRUN														26.3N 126.2E	
50	020700Z	22.8N 126.2E	P	5													26.3N 126.2E	
51	020700Z	22.9N 125.9E	LRUN														26.3N 125.3E	
52	021000Z	22.9N 125.7E	LRUN														26.3N 126.2E	
53	021000Z	23.0N 125.7E	LRUN														26.3N 125.3E	
54	021000Z	22.5N 125.4E	AC R															
55	021000Z	23.1N 125.2E	LRUN														23.4N 121.0E	
56	021000Z	23.1N 125.4E	LRUN														26.3N 125.3E	
57	021146Z	23.1N 125.2E	SAT	DIR DATA														
58	021150Z	23.1N 125.1E	LRUN														23.4N 121.0E	
59	021150Z	23.0N 125.2E	LRUN														26.3N 127.1E	
60	021150Z	23.0N 125.0E	LRUN														26.3N 126.2E	
61	021150Z	23.1N 125.1E	LRUN														26.3N 125.3E	
62	021192Z	23.1N 124.9E	SAT	DIR DATA														
63	021192Z	23.1N 124.9E	SAT	DIR DATA														
64	021192Z	23.1N 125.0E	SAT	DIR DATA														
65	021192Z	23.0N 125.2E	LRUN														26.2N 127.1E	
66	021300Z	23.0N 124.8E	LRUN														26.3N 126.2E	
67	021300Z	23.1N 124.8E	LRUN														26.3N 125.3E	
68	021300Z	23.0N 124.6E	LRUN														26.3N 126.2E	
69	021300Z	23.1N 124.6E	LRUN														26.2N 127.1E	
70	021300Z	23.1N 124.6E	LRUN														26.3N 125.3E	
71	021382Z	23.2N 124.1E	P	10	2	700	310	90	210	15	-	-	-	-	225	31	15	CTMC
72	021500Z	23.1N 124.3E	LRUN														23.4N 121.0E	
73	021500Z	23.1N 124.4E	LRUN														26.3N 126.2E	
74	021500Z	23.2N 124.4E	LRUN														26.3N 125.3E	
75	021500Z	23.2N 124.2E	LRUN														26.3N 125.3E	
76	021542Z	23.2N 124.0E	SAT	DIR DATA														
77	021542Z	23.2N 124.0E	LRUN														23.4N 121.0E	
78	021700Z	23.2N 123.8E	LRUN														26.3N 126.2E	
79	021700Z	23.3N 123.9E	LRUN														26.3N 125.3E	
80	021700Z	23.2N 123.5E	LRUN														23.4N 121.0E	
81	021700Z	23.3N 123.6E	LRUN														26.3N 126.2E	
82	021700Z	23.3N 123.6E	LRUN														26.3N 125.3E	
83	021700Z	23.3N 123.4E	LRUN														26.3N 126.2E	
84	021700Z	23.3N 123.4E	LRUN														26.3N 125.3E	
85	021700Z	23.3N 123.2E	LRUN														26.3N 126.2E	
86	022000Z	23.3N 123.3E	LRUN														26.3N 125.3E	
87	022000Z	23.3N 123.2E	LRUN														23.4N 121.0E	
88	022000Z	23.3N 123.1E	LRUN														26.3N 126.2E	
89	022000Z	23.3N 123.1E	LRUN														26.3N 125.3E	
90	022000Z	23.3N 123.3E	LRUN														26.3N 126.2E	
91	022100Z	23.3N 123.1E	LRUN														26.3N 125.3E	
92	022100Z	23.3N 123.1E	AC R															
93	022200Z	23.3N 123.0E	LRUN														26.3N 125.3E	
94	022200Z	23.3N 122.9E	LRUN														26.3N 126.2E	
95	022232Z	23.6N 122.8E	SAT	DIR DATA														
96	022240Z	23.6N 122.9E	SAT	DIR DATA														
97	022241Z	23.5N 122.7E	SAT	DIR DATA														
98	022242Z	23.5N 122.7E	LRUN														26.3N 126.2E	
99	022242Z	23.6N 122.8E	LRUN														26.3N 125.3E	
100	022342Z	23.7N 122.7E	SAT	(16.0/6.0-700.0/2400S)														
101	022342Z	23.6N 122.6E	SAT	(16.0/6.0-701.0/2400S)														
102	022342Z	23.6N 122.7E	SAT	DIR DATA														
103	030100Z	23.9N 122.2E	LRUN														26.3N 126.2E	
104	030100Z	23.7N 122.3E	LRUN														26.3N 125.3E	
105	030101Z	23.9N 122.7E	SAT	(16.0/6.0-701.0/2500S)														
106	030101Z	23.5N 122.3E	SAT	(15.5/5.5-701.0/2500S)														
107	030100Z	24.2N 121.9E	LRUN														26.3N 126.2E	
108	030100Z	23.9N 122.1E	LRUN														26.3N 125.3E	
109	030100Z	24.1N 121.6E	LRUN														26.3N 126.2E	
110	030100Z	24.1N 121.4E	LRUN														26.3N 126.2E	
111	030100Z	24.1N 120.5E	LRUN														26.3N 120.3E	
112	030100Z	24.1N 120.4E	LRUN														26.3N 120.3E	
113	030100Z	24.1N 120.3E	LRUN														26.3N 120.3E	
114	030100Z	24.1N 120.3E	LRUN														26.3N 120.3E	
115	031124Z	24.6N 119.7E	SAT	DIR DATA														
116	031124Z	24.3N 119.7E	SAT	DIR DATA														
117	031124Z	24.1N 119.3E	SAT	DIR DATA														
118	031125Z	24.9N 118.0E	SAT	DIR DATA														
119	031122Z	25.1N 119.2E	SAT	DIR DATA														
120	031122Z	24.6N 119.9E	SAT	DIR DATA														
121	031100Z	24.7N 119.3E	LRUN														27.6N 120.3E	
122	031100Z	24.9N 119.0E	LRUN														27.6N 120.3E	
123	031100Z	25.0N 118.5E	LRUN														27.6N 120.3E	
124	032200Z	25.0N 117.0E	SAT	DIR DATA														
125	040041Z	25.1N 116.2E	SAT	DIR DATA														
126	040042Z	25.5N 116.5E	SAT	DIR DATA														
127	041122Z	27.8N 113.9E	SAT	DIR DATA														

TROPICAL DEPRESSION 5
FIX POSITIONS FOR CYCLONE NO. 5
0600Z 06 AUG TO 0000Z 07 AUG

FIX NO.	TIME	POSIT	FIX ACQRY CAT	ACQRY NAV-MET	FIX LVL	FLI DIR	LVL VEL	WIND BRG	WIND RNG	MAX OBS SFC WIND VEL	MAX OBS WIND RNG	OBS MIN SLP	MIN 700MB MGT	FLY LVL TI/TO	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF RADAR	MSN NMHR
1	061112Z	19.2N 126.8E	SAT	(IR DATA						PCN 6	DMSP								
2	061125Z	22.7N 129.8E	SAT	(IR DATA						NOAA-4									
3	062216Z	19.2N 126.4E	SAT	(IR DATA						PCN 5	DMSP								
4	062336Z	23.0N 127.5E	SAT	(T 0/1.0 /						NOAA-4									
5	060024Z	19.2N 126.2E	SAT	(T 0/1.0 /						PCN 5	DMSP								
6	061100Z	21.2N 125.8E	SAT	(IR DATA						PCN 6	DMSP								
7	061100Z	21.0N 125.7E	SAT	(IR DATA						PCN 6	DMSP								
8	061204Z	25.0N 125.1E	SAT	(IR DATA						NOAA-4									
9	061305Z	21.0N 125.7E	SAT	(IR DATA						PCN 5	DMSP								
10	061306Z	21.1N 125.9E	SAT	(IR DATA						PCN 5	DMSP								
11	062032Z	22.2N 126.8E	SAT	(IR DATA						PCN 3	DMSP								
12	060006Z	22.2N 126.8E	SAT	(T 0/1.0 /S						PCN 3	DMSP								
13	060006Z	22.2N 127.6E	SAT	(T 0/1.0 /						PCN 5	DMSP								
14	060006Z	22.2N 126.9E	SAT	(T 0/1.0 /						PCN 5	DMSP								
15	060032Z	25.2N 122.5E	SAT	(IR DATA						NOAA-4									
16	061048Z	25.2N 124.5E	SAT	(IR DATA						PCN 4	DMSP								
17	061048Z	26.2N 124.7E	SAT	(IR DATA						PCN 4	DMSP								
18	061120Z	23.1N 123.5E	SAT	(IR DATA						NOAA-4									
19	061247Z	25.2N 124.6E	SAT	(IR DATA						PCN 3	DMSP								
20	061247Z	25.0N 124.1E	SAT	(IR DATA						PCN 3	DMSP								
21	062151Z	26.8N 122.1E	SAT	(IR DATA						PCN 3	DMSP								
22	062151Z	26.0N 122.0E	SAT	(IR DATA						PCN 4	DMSP								
23	062147Z	27.1N 121.7E	SAT	(T 0/1.0 /W						PCN 3	DMSP								

TYPHOON ORA
FIX POSITIONS FOR CYCLONE NO. 6
0600Z 10 AUG TO 1200Z 12 AUG

FIX NO.	TIME	POSIT	FIX ACQRY CAT	ACQRY NAV-MET	FIX LVL	FLI DIR	LVL VEL	WIND BRG	WIND RNG	MAX OBS SFC WIND VEL	MAX OBS WIND RNG	OBS MIN SLP	MIN 700MB MGT	FLY LVL TI/TO	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF RADAR	MSN NMHR
1	081024Z	17.1N 128.2E	SAT	(IR DATA						PCN 6	DMSP								
2	082112Z	19.1N 127.0E	SAT	(IR DATA						PCN 3	DMSP								
3	090304Z	20.7N 123.3E	SAT	(T 0/1.0 /						PCN 4	DMSP								
4	091012Z	20.5N 126.1E	SAT	(IR DATA						PCN 6	DMSP								
5	091152Z	20.6N 126.0E	SAT	(IR DATA						PCN 5	DMSP								
6	091008Z	20.5N 125.5E	SAT	(IR DATA						NOAA-4									
7	100021Z	22.0N 125.5E	SAT	(T 0/2.0 /D1.5/24HRS						NOAA-4									
8	100033Z	22.0N 125.4E	SAT	(T 0/1.0 /						PCN 6	DMSP								
9	100034Z	22.1N 125.6E	SAT	(T 0/1.0 /						PCN 5	DMSP								
10	100245Z	21.6N 125.8E	SAT	(T 2.5/2.5 /D1.5/24HRS						PCN 3	DMSP								
11	100300Z	21.7N 125.2E	LROR	- 7/111														24.0N 125.3E	
12	100300Z	21.8N 124.5E	LROR	- 7/111														24.0N 125.3E	
13	101109Z	23.2N 124.3E	SAT	(IR DATA						NOAA-4									
14	101142Z	22.2N 125.0E	SAT	(IR DATA						PCN 6	DMSP								
15	101142Z	22.2N 125.4E	SAT	(IR DATA						PCN 6	DMSP								
16	101157Z	22.2N 124.9E	SAT	(IR DATA						PCN 3	DMSP								
17	101157Z	22.2N 124.0E	SAT	(IR DATA						PCN 5	DMSP								
18	101157Z	22.2N 123.5E	SAT	(IR DATA						PCN 6	DMSP								
19	102100Z	23.1N 125.2E	LROR	- 5/113														24.3N 124.2E	
20	102101Z	23.2N 125.0E	P	1 10 700															
21	102200Z	23.2N 125.2E	LROR	- 5/113														24.3N 124.2E	2
22	102200Z	23.2N 125.1E	LROR	- 2/111														24.0N 125.3E	
23	102244Z	23.5N 125.5E	SAT	(IR DATA						PCN 5	DMSP								
24	102245Z	23.7N 125.5E	SAT	(IR DATA						PCN 3	DMSP								
25	102300Z	23.4N 125.2E	LROR	- 2/111														24.3N 124.2E	
26	102300Z	23.6N 125.1E	LROR	- 5/111														24.0N 125.3E	
27	110015Z	24.0N 125.3E	SAT	(T 3.5/3.5 /D2.5/24HRS						PCN 3	DMSP								
28	110015Z	24.1N 125.7E	SAT	(T 3.5/3.5 /D2.5/24HRS						PCN 3	DMSP								
29	110015Z	24.0N 125.6E	SAT	(T 4.0/4.0 /						PCN 5	DMSP								
30	110016Z	24.0N 125.6E	SAT	(T 3.5/3.5 /						PCN 3	DMSP								
31	110116Z	24.0N 125.2E	SAT	(T 3.5/3.5 /D1.5/25HRS						NOAA-4									
32	110200Z	23.9N 125.3E	LROR	- 6/111														24.0N 125.3E	
33	110400Z	24.2N 125.3E	P	5 5 700 360 55 170						20 60 170 20									3
34	110408Z	24.2N 125.1E	SAT	(T 4.0/4.0 /D1.5/24HRS						PCN 1	DMSP								
35	110700Z	24.7N 125.7E	LROR	- 5/113														24.3N 124.2E	
36	110700Z	24.8N 125.7E	LROR	- 5/111														24.0N 125.3E	
37	110700Z	24.7N 125.7E	LROR	- 25703														24.1N 127.0E	
38	110710Z	24.7N 125.2E	LROR	- 10 DEGREE SPIRAL OVERLAY, POOR FIX														24.0N 127.0E	
39	110742Z	25.1N 125.2E	LROR	- FAIR FIX														24.0N 127.0E	
40	110800Z	25.1N 125.9E	LROR	- 5/113														24.3N 124.2E	
41	110800Z	25.2N 125.7E	LROR	- 6/111														24.0N 125.3E	
42	110800Z	25.0N 125.7E	LROR	- 35/113														24.1N 127.0E	
43	110810Z	25.1N 125.2E	LROR	- 15 DEGREE SPIRAL OVERLAY, POOR FIX, NO WALL CLOUD														24.0N 127.0E	
44	110835Z	25.4N 125.3E	LROR	- 15 DEGREE SPIRAL OVERLAY, POOR FIX, NO WALL CLOUD														24.0N 127.0E	
45	110800Z	25.2N 125.6E	LROR	- 6/113														24.3N 124.2E	
46	110900Z	25.4N 125.6E	LROR	- 6/111														24.0N 125.3E	
47	110900Z	25.4N 125.7E	LROR	- 65/111														24.1N 127.0E	
48	110910Z	25.3N 125.3E	LROR	- 15 DEGREE SPIRAL OVERLAY, POOR FIX, 40 PERCENT WALL CLOUD, DIAMETER 20NM														24.0N 127.0E	
49	110920Z	25.5N 125.3E	P	1 5 700 240 55 160 60 55 160 60						477 289 13 11									4
50	111000Z	25.6N 125.3E	LROR	- 6/111														24.0N 125.3E	

TYPHOON OMA FIX POSITIONS FOR CYCLONE NO. 6 0000Z 10 AUG TO 1200Z 12 AUG																				
FIX NO.	TIME	POSIT	FIX ACQRY CAT	ACQRY-MET	FIX LVL	FLT DIR	LVI VEL	WIND HRR	WIND RRG	MAX OBS SFC WIND VEL	MAX OBS SFC WIND HRR	OBS MIN SLP	MIN 700MB HGT	FLT LVL TI/TO	EYE FORM	UNJEN- TATION	EYE DIA	POSIT OF RADAR	MSR NMHR	
51	111100Z	25.9N 125.9E	LRON																	
52	111100Z	25.8N 125.3E	LRON																	
53	111100Z	25.8N 125.0E	LRON																	
54	111100Z	26.1N 125.0E	SAT																	
55	111100Z	26.1N 124.7E	SAT																	
56	111100Z	26.1N 125.2E	LRON																	
57	111100Z	26.3N 125.5E	LRON																	
58	111100Z	26.0N 124.8E	SAT																	
59	111100Z	26.4N 124.9E	LRON																	
60	111100Z	26.4N 124.8E	LRON																	
61	111100Z	26.1N 124.7E	SAT																	
62	111100Z	26.4N 124.6E	SAT																	
63	111100Z	26.4N 125.0E	SAT																	
64	111100Z	26.3N 124.9E	LRON																	
65	111100Z	26.4N 125.0E	LRON																	
66	111100Z	26.5N 124.8E	LRON																	
67	111100Z	26.5N 124.7E	LRON																	
68	111100Z	26.5N 124.6E	LRON																	
69	111100Z	26.5N 125.0E	LRON																	
70	111100Z	26.6N 124.7E	LRON																	
71	111100Z	26.4N 125.0E	LRON																	
72	111100Z	26.7N 124.3E	LRON																	
73	111100Z	26.4N 124.5E	LRON																	
74	111100Z	26.1N 124.2E	LRON																	
75	111100Z	26.8N 124.6E	LRON																	
76	111100Z	26.8N 124.1E	LRON																	
77	111100Z	27.0N 124.2E	LRON																	
78	111100Z	26.9N 124.0E	LRON																	
79	111100Z	27.1N 123.9E	LRON																	
80	112000Z	26.1N 124.1E	P																	
81	112100Z	27.2N 123.4E	LRON																	
82	112130Z	27.5N 123.6E	SAT																	
83	112157Z	27.4N 122.8E	SAT																	
84	112157Z	27.6N 122.6E	SAT																	
85	112157Z	27.8N 123.2E	SAT																	
86	120016Z	27.5N 123.0E	SAT																	
87	120049Z	27.9N 122.5E	SAT																	
88	121105Z	28.3N 120.3E	SAT																	
89	121117Z	28.1N 120.3E	SAT																	
90	121139Z	28.2N 120.2E	SAT																	
91	121139Z	28.5N 120.0E	SAT																	
92	121139Z	28.1N 120.2E	SAT																	
93	122212Z	29.2N 118.2E	SAT																	
94	122139Z	29.4N 117.7E	SAT																	
95	122139Z	29.1N 117.8E	SAT																	

TYPHOON PHYLLIS FIX POSITIONS FOR CYCLONE NO. 7 0000Z 12 AUG TO 1200Z 18 AUG																				
FIX NO.	TIME	POSIT	FIX CAT	ACQRY NA-MET	FIX LVL	MAX OBS		MAX OBS		UdS MIN SLP	MIN 700MB HGT	FLT LVL TI/TO	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF RADAR	MSR NMHR			
						DIR	VEL	WIND RRG	SFC WIND VEL									RHG RRG		
1	102244Z	14.3N 138.2E	SAT		(11.0/1.0 /	/	HWS)		PCN 3	0MSP										
2	102244Z	14.2N 138.2E	SAT		(11.0/1.0 /	/	HWS)		PCN 4	0MSP										
3	110448Z	12.5N 137.1E	SAT		(1R DATA		)		PCN 5	0MSP									
4	111116Z	12.5N 137.2E	SAT		(1R DATA		)		PCN 5	0MSP									
5	111116Z	15.1N 137.2E	SAT		(1R DATA		)		PCN 5	0MSP									
6	112057Z	13.1N 135.9E	SAT		(11.0/1.0 /S	/25HWS)			PCN 5	0MSP										
7	112057Z	14.9N 137.8E	SAT		(11.0/1.0 /S	/25HWS)			PCN 5	0MSP										
8	120045Z	12.7N 137.9E	P	5	5	1500	290	30	30	2	30	180	5	992	-	25 25	-	-	-	
9	120247Z	12.8N 137.6E	P	5	5	1500	240	30	20	25	35	30	5	986	-	26 24	-	-	-	
10	120446Z	13.2N 138.0E	SAT		(1R DATA		)		PCN 6	0MSP									
11	121000Z	13.4N 137.5E	P	5	5	700	360	30	270	24	-	-	-	993	302	11 10	-	-	-	
12	121102Z	13.7N 136.9E	SAT		(1R DATA		)		NOAA-4					(CONF 02)					
13	121139Z	13.3N 136.5E	SAT		(1R DATA		)		PCN 5	0MSP									
14	121432Z	13.6N 136.9E	P	5	5	700	130	35	50	15	-	-	-	990	300	14 12	-	-	-	
15	122212Z	14.0N 136.2E	SAT		(1R DATA		)		PCN 5	0MSP									
16	122139Z	14.2N 136.5E	SAT		(13.5/3.5+/02.5/24HWS)				PCN 3	0MSP										
17	122139Z	14.5N 137.5E	SAT		(12.5/2.5 /	/	HWS)		PCN 3	0MSP										
18	122139Z	14.5N 136.5E	SAT		(13.0/3.0+/02.0/24HWS)				PCN 3	0MSP										
19	130245Z	14.2N 136.5E	P	5	5	700	190	40	80	45	35	80	30	982	293	15 9	ETIP	E-W	20X10	
20	130312Z	14.5N 136.0E	SAT		(13.0/3.0 /	/	HWS)		PCN 3	0MSP										
21	130432Z	15.1N 136.7E	P	5	5	700	180	55	100	30	60	110	20	974	286	16 12	CTWC		30	
22	130426Z	15.0N 136.2E	SAT		(1R DATA		)		PCN 6	0MSP									
23	131157Z	15.0N 136.0E	SAT		(1R DATA		)		NOAA-4					(CONF 02)					
24	131220Z	15.4N 135.8E	SAT		(1R DATA		)		PCN 5	0MSP									
25	131220Z	15.4N 136.3E	SAT		(1R DATA		)		PCN 5	0MSP									
26	131220Z	15.6N 136.8E	SAT		(1R DATA		)		PCN 5	0MSP									
27	131559Z	16.1N 136.6E	P	5	5	700	290	80	200	15	-	-	-	964	277	19 13	CTWC		20	
28	132048Z	16.1N 136.9E	P	10	5	700	180	100	270	15	100	90	10	951	266	17 13	CTWC		20	
29	132047Z	16.1N 136.8E	SAT		(1R DATA		)		PCN 1	0MSP									
30	132047Z	16.1N 137.2E	SAT		(1R DATA		)		PCN 1	0MSP									
31	132047Z	16.1N 137.2E	SAT		(15.5/5.5+/02.0/24HWS)				PCN 1	0MSP										
32	132107Z	16.1N 136.9E	SAT		(15.5/5.5+/02.0/24HWS)				PCN 1	0MSP										
33	132107Z	16.5N 136.9E	SAT		(14.5/4.5+/02.0/24HWS)				PCN 1	0MSP										

SYMPHON WHYLIS
FIX POSITIONS FOR CYCLONE NO. 7
0000Z 12 AUG TO 1200Z 18 AUG

FIX NO.	TIME	POSIT	FIX CAT	ACCTY	FIX LVL	FLT DIM	MAX OHS VEL	MAX OHS WIND HRG	MAX OHS SFC WIND HRG	UBS MIN SLP	MIN 700MH MGT	FLT LVL TI/TO	EYP FORM	ORIENT- TATION	CTF DIA	POSIT OF RADAR	MSN NMHR
34	132100Z	14.8N 136.9E	SAT	(TS.0/5.0 /02.0/24HRS)					PCN 1 DMSP								
35	140142Z	14.8N 136.4E	SAT	(TS.5/4.5 /02.0/25HRS)					NOAA-4								
36	140122Z	14.8N 137.2E	SAT	(TS.5/4.5 /01.5/24HRS)					PCN 2 DMSP								
37	140452Z	21.6N 137.0E	P		5	3	700	210 125 120	20 60 170	05	931	249	17 13	CTMC		20	5
38	141053Z	22.1N 136.7E	SAT	(TH DATA)					PCN 2 DMSP								
39	141054Z	21.8N 136.6E	SAT	(TH DATA)					PCN 1 DMSP								
40	141054Z	21.7N 137.3E	SAT	(TH DATA)					PCN 2 DMSP								
41	141054Z	22.0N 136.7E	SAT	(TH DATA)					NOAA-4								
42	141022Z	22.1N 136.8E	SAT	(TH DATA)					PCN 1 DMSP								
43	141022Z	22.1N 137.1E	SAT	(TH DATA)					PCN 1 DMSP								
44	141022Z	22.3N 137.0E	SAT	(TH DATA)					PCN 1 DMSP								
45	141052Z	21.2N 137.0E	P		5	5	700	330 99 250	14 - -	-	920	239	20 16	CTMC		15	5
46	142130Z	25.3N 137.1E	P		5	3	700	270 115 180	25 100 180	25	931	247	17 15	CTMC		20	6
47	142150Z	25.3N 137.1E	SAT	(TH DATA)					PCN 1 DMSP								
48	142152Z	25.3N 137.1E	SAT	(TH DATA)					PCN 1 DMSP								
49	142157Z	25.3N 137.1E	SAT	(TH DATA)					PCN 1 DMSP								
50	142102Z	25.6N 137.1E	SAT	(TS.5/6.5 /01.0/24HRS)					PCN 1 DMSP								
51	142102Z	25.5N 137.2E	SAT	(TS.0/6.0 /01.5/24HRS)					PCN 1 DMSP								
52	142102Z	25.5N 137.1E	SAT	(TS.5/6.5 /01.5/24HRS)					PCN 1 DMSP								
53	142112Z	25.6N 137.0E	SAT	(TS.0/6.0 /01.5/24HRS)					NOAA-4								
54	150253Z	27.5N 137.4E	SAT	(TS.5/5.5 /01.5/24HRS)					PCN 2 DMSP								
55	150259Z	26.6N 137.0E	P		5	5	700	30 75 300	25 80 130	15	934	251	17 14	CTMC		20	6
56	151101Z	28.1N 135.8E	SAT	(TH DATA)					PCN 2 DMSP								
57	151101Z	28.2N 136.0E	SAT	(TH DATA)					PCN 1 DMSP								
58	151101Z	28.3N 135.7E	SAT	(TH DATA)					PCN 1 DMSP								
59	151103Z	28.3N 135.8E	SAT	(TH DATA)					PCN 1 DMSP								
60	151104Z	28.3N 136.0E	SAT	(TH DATA)					PCN 1 DMSP								
61	151104Z	28.3N 135.6E	SAT	(TH DATA)					PCN 1 DMSP								
62	151156Z	28.5N 135.5E	SAT	(TH DATA)					NOAA-4								
63	151102Z	28.8N 135.3E	P		5	2	700	60 90 340	30 - -	-	939	256	15 14	CTMC		18	7
64	152052Z	29.3N 134.7E	P		10	5	700	240 70 140	30 80 130	8	943	259	17 14	CTMC		15	8
65	152144Z	29.1N 134.6E	SAT	(TH DATA)					PCN 1 DMSP								
66	152144Z	29.1N 134.7E	SAT	(TH DATA)					PCN 1 DMSP								
67	152144Z	29.1N 134.6E	SAT	(TS.0/6.0 /01.5/24HRS)					PCN 1 DMSP								
68	152144Z	29.1N 134.7E	SAT	(TS.0/6.0 /01.0/24HRS)					PCN 1 DMSP								
69	152144Z	29.1N 134.5E	SAT	(TS.0/6.0 /01.5/24HRS)					PCN 1 DMSP								
70	160052Z	29.1N 134.2E	SAT	(TS.0/6.0 /01.0/24HRS)					NOAA-4								
71	160100Z	29.7N 134.4E	LRDR	- 22913												30.6N 131.0E	
72	160100Z	29.7N 134.3E	LRDR	- 20913												30.6N 131.0E	
73	160142Z	29.8N 134.2E	P		5	5	700	280 100 180	45 80 180	50	945	261	17 14	CTMC		30	9
74	160100Z	29.8N 134.3E	LRDR	- 20913												30.6N 131.0E	
75	160100Z	29.9N 134.3E	LRDR	- 10913												30.6N 131.0E	
76	160100Z	30.0N 134.3E	LRDR	- 10913												30.6N 131.0E	
77	160100Z	30.1N 134.3E	LRDR	- 10913												30.6N 131.0E	
78	160053Z	30.2N 134.0E	P		5	5	700	210 90 120	60 55 140	50	-	-	18 12	CTMC		40	9
79	160100Z	30.2N 134.3E	LRDR	- 22913												30.6N 131.0E	
80	161100Z	30.6N 134.2E	LRDR	- 22943												30.6N 131.0E	
81	161029Z	30.6N 134.0E	SAT	(TH DATA)					PCN 2 DMSP								
82	161029Z	30.6N 134.8E	SAT	(TH DATA)					PCN 2 DMSP								
83	161100Z	30.8N 134.1E	LRDR	- 21913												30.6N 131.0E	
84	161125Z	30.9N 134.7E	SAT	(TH DATA)					PCN 1 DMSP								
85	161125Z	30.8N 134.4E	SAT	(TH DATA)					PCN 1 DMSP								
86	161125Z	30.1N 133.5E	SAT	(TH DATA)					PCN 1 DMSP								
87	161000Z	30.9N 133.9E	LRDR	- 10913												30.6N 131.0E	
88	161100Z	31.1N 133.8E	LRDR	- 22913												30.6N 131.0E	
89	161107Z	30.8N 133.7E	SAT	(TH DATA)					PCN 1 DMSP								
90	161107Z	31.1N 133.8E	SAT	(TH DATA)					PCN 1 DMSP								
91	161100Z	31.2N 133.5E	LRDR	- 21913												30.6N 131.0E	
92	161100Z	31.1N 133.3E	LRDR	- 22913												30.6N 131.0E	
93	161100Z	31.6N 133.2E	LRDR	- 20913												30.6N 131.0E	
94	161100Z	31.7N 133.1E	LRDR	- 20911												30.6N 131.0E	
95	161100Z	31.7N 133.1E	LRDR	- 20913												30.6N 131.0E	
96	161100Z	31.8N 133.1E	LRDR	- 50913												30.6N 131.0E	
97	162000Z	31.9N 133.0E	LRDR	- 20917												30.6N 131.0E	
98	162000Z	32.0N 133.1E	LRDR	- 51913												30.6N 131.0E	
99	162000Z	32.0N 133.1E	LRDR	- 51913												30.6N 131.0E	
100	162100Z	32.1N 132.9E	LRDR	-												30.6N 131.0E	
101	162142Z	32.1N 132.9E	SAT	(TH DATA)					PCN 1 DMSP								
102	162142Z	32.1N 132.9E	SAT	(TH DATA)					PCN 1 DMSP								
103	162152Z	32.2N 132.9E	SAT	(I - 30977												30.6N 130.4E	
104	162100Z	32.1N 132.9E	LRDR	- 20913												30.6N 131.0E	
105	162100Z	32.3N 132.9E	LRDR	-												30.6N 130.4E	
106	162225Z	32.1N 132.9E	SAT	(TS.0/5.0 /01.0/24HRS)					PCN 1 DMSP								
107	162225Z	32.1N 132.5E	SAT	(I - 20913												30.6N 131.0E	
108	162100Z	32.1N 132.9E	LRDR	- 20927												30.6N 130.4E	
109	170000Z	32.1N 132.8E	LRDR	- 20843												30.6N 131.0E	
110	170000Z	32.2N 132.8E	LRDR	-												30.6N 131.0E	
111	170000Z	32.1N 133.0E	SAT	(TS.0/5.0 /01.0/24HRS)					PCN 1 DMSP								
112	170000Z	32.1N 132.7E	SAT	(TH DATA)					NOAA-4								
113	170058Z	32.2N 133.1E	SAT	(I - 77777												30.6N 133.1E	
114	170100Z	32.1N 132.4E	LRDR	- 22943												30.6N 131.0E	
115	170100Z	31.1N 132.4E	LRDR	- 50913												30.6N 133.1E	
116	170100Z	31.6N 132.4E	LRDR	- 69777												30.6N 131.0E	
117	170100Z	31.1N 132.8E	LRDR	-												30.6N 131.0E	
118	170146Z	31.1N 132.5E	SAT	(I - 60073												30.6N 131.0E	
119	170100Z	31.6N 132.4E	LRDR	- 60073												30.6N 133.1E	
120	170100Z	31.1N 132.3E	LRDR	- 60073												30.6N 138.9E	
121	170100Z	31.6N 132.1E	LRDR	- 20913												30.6N 133.1E	
122	170100Z	31.7N 132.2E	LRDR	- 20913												30.6N 133.1E	
123	170100Z	31.8N 131.9E	LRDR	- 20913												30.6N 133.1E	
124	170100Z	31.8N 131.8E	LRDR	- 35773												30.6N 133.1E	

TYPHOON PHYLLIS
FIX POSITIONS FOR CYCLONE NO. 7
0000Z 12 AUG TO 1200Z 18 AUG

FIX NO.	TIME	POSIT	FIX ACQRY CAT NAV-MET	FIX LVL	MAX OBS			SFC WIND	VEL HND	RNG	OBS MIN SLP	MIN 700MB MGT	FLT LVL TI/TO	EYE FORM	ORIEN- TATION	EYE DIA	POSIT OF KADAM	MSN NMHR
					DIR	VEL	HRG	HRG	HRG	HRG								
125	170000Z	34.9N 131.7E	LRDR	- 20407													34.9N 130.4E	
126	170000Z	34.9N 131.7E	LRDR	- 35773													34.9N 130.4E	
127	170000Z	34.9N 131.7E	LRDR	- 35773													34.9N 130.4E	
128	170000Z	34.9N 131.7E	LRDR	- 20412													34.9N 130.4E	
129	170000Z	34.9N 131.5E	LRDR	- 20357													34.9N 130.4E	
130	170000Z	34.9N 131.6E	LRDR	- 35773													34.9N 130.4E	
131	170000Z	34.9N 131.4E	LRDR	- 10327													34.9N 130.4E	
132	170000Z	34.9N 131.6E	LRDR	- 57772													34.9N 130.4E	
133	170000Z	34.9N 131.3E	LRDR	-													34.9N 130.4E	
134	170000Z	34.9N 131.7E	SAT	(IR DATA													34.9N 130.4E	
135	170000Z	34.9N 131.7E	SAT	(I - 24717													34.9N 130.4E	
136	170000Z	34.9N 130.9E	LRDR	-													34.9N 130.4E	
137	170000Z	34.9N 130.6E	SAT	(IR DATA													34.9N 130.4E	
138	170000Z	34.9N 131.7E	SAT	(I - 24717													34.9N 130.4E	
139	170000Z	34.9N 130.5E	LRDR	-													34.9N 130.4E	
140	170000Z	34.9N 130.4E	SAT	(12.0/3.0-7/1.0/24HRS)													34.9N 130.4E	
141	170000Z	34.9N 130.6E	SAT	(13.0/4.0-7/1.0/24HRS)													34.9N 130.4E	
142	182130Z	40.9N 130.6E	SAT	(IR DATA														

TYPHOON PHYLLIS
FIX POSITIONS FOR CYCLONE NO. 8
0000Z 18 AUG TO 1200Z 23 AUG

FIX NO.	TIME	POSIT	FIX CAT	ACQRY NAV-MET	FIX LVL	MAX OBS			SFC WIND	OBS MIN SLP	MIN 700MB MGT	FLT LVL TI/TO	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF KADAM	MSN NMHR
						DIR	VEL	HRG									
1	170000Z	23.2N 120.9E	SAT	(12.0/2.0-7/1.0/24HRS)					PCN 5	UMSP							
2	171159Z	21.0N 121.7E	SAT	(IR DATA					PCN 6	UMSP							
3	171159Z	26.9N 124.3E	SAT	(IR DATA					PCN 6	UMSP							
4	171240Z	22.5N 126.2E	SAT	(IR DATA					PCN 5	UMSP							
5	171249Z	23.9N 125.7E	SAT	(IR DATA					PCN 5	UMSP							
6	172120Z	23.9N 129.9E	SAT	(IR DATA					PCN 5	UMSP							
7	172448Z	24.4N 130.5E	SAT	(11.0/2.0-7/1.0/24HRS)					PCN 3	UMSP							
8	172448Z	24.4N 130.2E	SAT	(IR DATA					PCN 5	UMSP							
9	172448Z	24.6N 130.6E	SAT	(11.0/1.0-7/1.0/24HRS)					PCN 3	UMSP							
10	180011Z	25.4N 130.0E	SAT	(IR DATA					PCN 5	UMSP							
11	180013Z	24.7N 130.4E	P	5 25 1500 240 55 140 130 45 140 150						991	-	22 25	-	-	-	1	
12	180005Z	24.9N 130.4E	P	10 15 1500 230 40 140 100 40 140 80						993	-	28	-	-	-	2	
13	181005Z	24.4N 130.9E	SAT	(IR DATA					PCN 5	UMSP							
14	181005Z	23.9N 133.6E	SAT	(IR DATA					PCN 6	UMSP							
15	181230Z	25.2N 132.1E	SAT	(IR DATA					PCN 3	UMSP							
16	181230Z	25.3N 132.2E	SAT	(IR DATA					PCN 3	UMSP							
17	181230Z	25.3N 131.7E	SAT	(IR DATA					PCN 3	UMSP							
18	181400Z	24.9N 131.0E	P	5 5 1500 180 30 90 60 - - -						991	-	25 25	ELLIP	N-S	50X35	3	
19	182108Z	25.1N 130.9E	SAT	(IR DATA					PCN 6	UMSP							
20	182108Z	25.2N 131.2E	SAT	(IR DATA					PCN 6	UMSP							
21	182108Z	25.2N 131.3E	SAT	(IR DATA					PCN 6	UMSP							
22	182119Z	25.9N 130.7E	P	5 5 1500 150 55 60 50 35 120						992	-	25 23	-	-	-	3	
23	182130Z	25.9N 130.2E	SAT	(12.0/2.0-7/1.0/24HRS)					PCN 3	UMSP							
24	182130Z	25.4N 130.1E	SAT	(11.0/1.0-7/1.0/24HRS)					PCN 3	UMSP							
25	182130Z	25.9N 130.2E	SAT	(12.0/2.0-7/1.0/24HRS)					PCN 3	UMSP							
26	190020Z	26.9N 130.2E	SAT	(11.5/1.5-7/1.0/24HRS)					PCN 3	UMSP							
27	190053Z	25.7N 130.2E	P	2 5 700 170 45 50 30 35 50 30						985	295	15 15	-	-	-	4	
28	191000Z	26.7N 129.5E	LRDR	- 67777												26.9N 127.0E	
29	191000Z	26.9N 129.3E	LRDR	- 67777												26.9N 127.0E	
30	191135Z	26.9N 129.7E	SAT	(IR DATA					PCN 3	UMSP							
31	191135Z	26.9N 130.0E	SAT	(IR DATA					PCN 3	UMSP							
32	191211Z	26.9N 129.5E	SAT	(IR DATA					PCN 3	UMSP							
33	191212Z	26.9N 129.7E	SAT	(IR DATA					PCN 3	UMSP							
34	191212Z	26.9N 129.6E	SAT	(IR DATA					PCN 3	UMSP							
35	191500Z	26.9N 129.3E	P	5 15 700 120 40 30 90 - - -						991	301	15 15	-	-	-	5	
36	191500Z	26.7N 128.9E	LRDR	- 25707					PCN 3	UMSP						26.9N 127.0E	
37	191600Z	26.4N 128.7E	LRDR	- 67772												26.9N 127.0E	
38	192000Z	26.5N 129.3E	P	5 5 700 120 40 360 120 35 210 10						987	298	18 15	-	-	-	5	
39	192000Z	26.9N 128.7E	LRDR	- POOR FIX, NO EYE WALL, 10 DEG SPIRAL OVERLAY												26.9N 127.0E	
40	192110Z	26.9N 128.4E	LRDR	- FAIR FIX, CIRCULAR EYE 30 NM DIAM, 50 PERCENT WALL CLOUD, 15 DEG SPOV												26.9N 127.0E	
41	192135Z	26.9N 128.8E	LRDR	- FAIR FIX, CIRCULAR EYE 10 NM DIAM, 40 PERCENT WALL CLOUD, 10 DEG SPOV												26.9N 127.0E	
42	192138Z	26.4N 129.0E	SAT	(IR DATA					PCN 5	UMSP							
43	192138Z	26.7N 128.4E	SAT	(13.0/3.0-7/1.0/24HRS)					PCN 5	UMSP							
44	192127Z	26.9N 128.9E	SAT	(13.0/3.0-7/1.0/24HRS)					PCN 3	UMSP							
45	192122Z	26.4N 128.9E	SAT	(12.0/2.0-7/1.0/24HRS)					PCN 3	UMSP							
46	192127Z	27.9N 129.0E	SAT	(IR DATA					PCN 1	UMSP							
47	192156Z	26.2N 128.5E	SAT	(13.5/3.5-7/1.0/24HRS)					NOAA-4	(CONF 01)							
48	200022Z	27.4N 129.1E	SAT	(12.5/2.5-7/1.0/24HRS)					PCN 3	UMSP							
49	200325Z	26.9N 128.5E	P	1 2 700 270 40 230 25 25 230 20						991	301	16 14	-	-	-	6	
50	200338Z	26.8N 128.1E	LRDR	- POOR FIX, NO WALL CLOUD, 15 DEG SPIRAL OVERLAY												26.9N 127.0E	
51	200430Z	26.4N 128.3E	LRDR	- 15 DEGREE SPIRAL OVERLAY, POOR FIX, NO WALL CLOUD												26.9N 127.0E	
52	200440Z	26.6N 128.3E	LRDR	- 10 DEGREE SPIRAL OVERLAY, POOR FIX, NO WALL CLOUD												26.9N 127.0E	
53	200715Z	27.0N 128.1E	LRDR	- 10 DEGREE SPIRAL OVERLAY, POOR FIX, NO WALL CLOUD												26.9N 127.0E	
54	200740Z	26.8N 128.8E	P	5 10 700 360 40 270 15 45 220 60						986	297	19 17	-	-	-	6	
55	201122Z	26.8N 129.0E	SAT	(IR DATA					PCN 5	UMSP							
56	201123Z	27.1N 129.4E	SAT	(IR DATA					PCN 5	UMSP							
57	201134Z	27.0N 128.5E	SAT	(IR DATA					PCN 3	UMSP							
58	201134Z	26.9N 128.9E	SAT	(IR DATA					PCN 5	UMSP							
59	201134Z	27.0N 128.6E	SAT	(IR DATA					PCN 3	UMSP							

FLX POSITIONS FOR CYCLONE NO. 8
0600Z 18 AUG TO 1800Z 23 AUG

[illegible]

TYphoon Rita
FIX POSITIONS FOR CYCLONE NO. 8
0600Z 18 AUG TO 1800Z 23 AUG

FIX NO.	TIME	POSIT	FIX CAT	ACFT	LVL	FLI DIR	LVL	WIND	MAX OBS	SFC WIND	OBS MIN	FLY T1/T0	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF RADAR	MSK NMHR
151	220400Z	32.3N 134.2E	LROR													33.3N 134.2E	
152	221000Z	32.3N 134.5E	LROR													30.6N 131.0E	
153	221000Z	32.5N 134.3E	LROR													33.3N 134.2E	
154	221043Z	33.0N 133.8E	SAT	(IN DATA					NOAA-4								
155	221058Z	32.7N 134.4E	SAT	(IN DATA					PCN 1 DMSP								
156	221058Z	32.6N 134.5E	SAT	(IN DATA					PCN 1 DMSP								
157	221100Z	32.7N 134.3E	LROR													33.3N 134.2E	
158	221000Z	32.9N 134.4E	LROR													35.3N 138.7E	
159	221000Z	33.1N 134.3E	LROR													33.3N 134.2E	
160	221058Z	32.8N 134.5E	SAT	(IN DATA					PCN 1 DMSP								
161	221058Z	32.8N 134.6E	SAT	(IN DATA					PCN 1 DMSP								
162	221000Z	33.1N 134.5E	LROR													35.3N 138.7E	
163	221000Z	33.1N 134.4E	LROR													33.3N 134.2E	
164	221000Z	33.4N 134.5E	LROR													33.3N 134.2E	
165	221000Z	33.4N 134.5E	LROR													35.3N 138.7E	
166	221000Z	33.6N 134.5E	LROR													33.3N 134.2E	
167	221000Z	33.6N 134.5E	LROR													35.3N 138.7E	
168	221000Z	33.6N 134.7E	LROR													30.3N 132.0E	
169	221000Z	33.7N 134.5E	LROR													31.3N 134.2E	
170	221000Z	33.8N 134.5E	LROR													35.3N 133.1E	
171	221000Z	33.9N 134.8E	LROR													30.3N 132.0E	
172	221000Z	33.9N 134.6E	LROR													33.3N 134.2E	
173	221000Z	34.1N 134.8E	LROR													35.3N 133.1E	
174	221000Z	34.2N 134.7E	LROR													30.3N 132.0E	
175	221000Z	34.3N 134.7E	LROR													35.3N 138.7E	
176	221000Z	34.1N 134.6E	LROR													35.3N 138.7E	
177	221000Z	34.2N 134.7E	LROR													35.3N 133.1E	
178	221000Z	34.2N 134.8E	LROR													33.3N 134.2E	
179	221000Z	34.4N 134.9E	LROR													35.3N 133.1E	
180	222000Z	34.3N 135.1E	LROR													35.3N 138.7E	
181	222216Z	35.0N 135.9E	SAT	(IN DATA					PCN 5 DMSP								
182	222217Z	35.0N 136.1E	SAT	(IN DATA					PCN 5 DMSP								
183	230206Z	36.2N 136.5E	SAT	(12.5/3.5-71.0/2.0MS)					PCN 3 DMSP								
184	230400Z	37.2N 136.6E	LROR													35.3N 138.7E	
185	230500Z	37.5N 137.2E	LROR													35.3N 138.7E	
186	230600Z	38.0N 138.2E	LROR													35.3N 138.7E	
187	231040Z	38.9N 142.1E	SAT	(IN DATA					PCN 1 DMSP								
188	231040Z	38.8N 142.0E	SAT	(IN DATA					PCN 5 DMSP								

TROPICAL STORM SUSAN
FIX POSITIONS FOR CYCLONE NO. 9
1200Z 26 AUG TO 0600Z 01 SEP

FIX NO.	TIME	POSIT	FIX CAT	ACFT	LVL	FLI DIR	LVL	WIND	MAX OBS	SFC WIND	OBS MIN	FLY T1/T0	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF RADAR	MSK NMHR
1	212235Z	22.3N 158.6E	SAT	(IN DATA					PCN 5 DMSP								
2	222216Z	23.0N 158.5E	SAT	(IN DATA					PCN 3 DMSP								
3	232158Z	23.6N 158.6E	SAT	(IN DATA					PCN 3 DMSP								
4	242139Z	23.7N 153.5E	SAT	(IN DATA					PCN 3 DMSP								
5	252122Z	25.1N 153.5E	SAT	(11.0/1.0 / / MS)					PCN 5 DMSP								
6	252303Z	25.1N 153.4E	SAT	(IN DATA					PCN 5 DMSP								
7	260829Z	25.7N 153.2E	SAT	(IN DATA					PCN 6 DMSP								
8	261010Z	26.0N 153.5E	SAT	(IN DATA					PCN 5 DMSP								
9	261145Z	25.8N 153.5E	SAT	(IN DATA					PCN 5 DMSP								
10	262113Z	27.7N 152.9E	SAT	(11.0/1.0 /S /2.0MS)					PCN 3 DMSP								
11	262113Z	27.8N 153.1E	SAT	(IN DATA					PCN 3 DMSP								
12	262245Z	27.7N 152.8E	SAT	(11.0/1.0 / / MS)					PCN 3 DMSP								
13	262245Z	27.7N 152.9E	SAT	(12.0/2.0 / / MS)					PCN 3 DMSP								
14	270233Z	28.8N 150.8E	SAT	(IN DATA					PCN 6 DMSP								
15	270422Z	30.0N 152.0E	SAT	(IN DATA					NOAA-4								
16	270459Z	30.4N 151.9E	SAT	(IN DATA					PCN 3 DMSP								
17	270459Z	30.4N 152.4E	SAT	(IN DATA					PCN 6 DMSP								
18	271126Z	30.6N 151.8E	SAT	(IN DATA					PCN 3 DMSP								
19	271126Z	30.6N 152.1E	SAT	(IN DATA					PCN 3 DMSP								
20	271127Z	30.3N 152.2E	SAT	(IN DATA					PCN 3 DMSP								
21	272101Z	31.9N 152.0E	SAT	(IN DATA					PCN 3 DMSP								
22	272101Z	32.1N 152.5E	SAT	(IN DATA					PCN 4 DMSP								
23	272226Z	32.1N 151.6E	SAT	(12.5/2.5 /01.5/2.3MS)					PCN 3 DMSP								
24	280446Z	33.4N 151.6E	SAT	(IN DATA					PCN 1 DMSP								
25	281029Z	33.8N 151.2E	SAT	(IN DATA					NOAA-4								
26	281108Z	33.6N 151.8E	SAT	(IN DATA					PCN 3 DMSP								
27	282049Z	34.6N 152.4E	SAT	(IN DATA					PCN 3 DMSP								
28	282208Z	34.7N 152.5E	SAT	(12.5/2.5 /S /2.0MS)					PCN 1 DMSP								
29	282234Z	39.5N 152.6E	SAT	(13.5/3.5 /01.0/2.3MS)					NOAA-4								
30	290156Z	35.4N 154.6E	SAT	(IN DATA					PCN 1 DMSP								
31	290429Z	36.1N 158.5E	SAT	(IN DATA					NOAA-4								
32	290534Z	36.2N 158.7E	SAT	(IN DATA					PCN 4 DMSP								
33	290534Z	36.1N 158.5E	SAT	(IN DATA					PCN 4 DMSP								
34	291025Z	37.5N 158.6E	SAT	(IN DATA					NOAA-4								
35	291049Z	36.1N 158.9E	SAT	(IN DATA					PCN 1 DMSP								
36	291050Z	36.4N 158.9E	SAT	(IN DATA					PCN 2 DMSP								
37	292037Z	37.1N 158.4E	SAT	(IN DATA					PCN 3 DMSP								
38	292037Z	36.9N 158.7E	SAT	(IN DATA					PCN 3 DMSP								
39	292150Z	36.7N 158.7E	SAT	(12.0/2.5 /S /2.0MS)					PCN 3 DMSP								

TROPICAL STORM SUSAN
FIX POSITIONS FOR CYCLONE NO. 9
1200Z 26 AUG TO 0600Z 01 SEP

FIX NO.	TIME	COORD	FIX ACQTY	FIX CAT NA	ACQTY MET	FIX LVL	FLT DIR	VEL	WIND BRG	WIND MNG	MAX OBS SFC WIND VEL	MAX OBS WIND BRG	WIND MNG	UBS MIN SLP	MIN T00MB	FLY LVL	FLY TI/TO	EYE FORM	UNION- TATION	EYE DIA	POSIT OF MAUAN	MSN NMHH
40	094150Z	36.5N 157.0E	SAT																			
41	094507Z	36.5N 156.5E	SAT																			
42	100137Z	37.1N 157.3E	SAT																			
43	100522Z	37.1N 158.5E	SAT																			
44	100522Z	37.1N 158.6E	SAT																			
45	101322Z	36.1N 158.9E	SAT																			
46	102022Z	37.2N 158.9E	SAT																			
47	102022Z	37.1N 158.5E	SAT																			
48	102022Z	37.2N 158.2E	SAT																			
49	102131Z	37.2N 158.0E	SAT																			
50	102131Z	37.2N 158.9E	SAT																			
51	102227Z	37.2N 158.9E	SAT																			
52	110119Z	36.1N 158.7E	SAT																			
53	110119Z	36.9N 158.9E	SAT																			
54	110119Z	36.1N 158.0E	SAT																			
55	110202Z	36.1N 158.2E	SAT																			
56	111133Z	36.0N 158.0E	SAT																			
57	112133Z	36.2N 158.0E	SAT																			
58	112133Z	36.2N 157.2E	SAT																			
59	112122Z	36.5N 158.9E	SAT																			
60	010100Z	40.2N 157.6E	SAT																			
61	011020Z	40.1N 158.5E	SAT																			
62	012030Z	41.1N 158.6E	SAT																			

TYPHOON JESS
FIX POSITIONS FOR CYCLONE NO. 10
0000Z 02 SEP TO 0600Z 10 SEP

FIX NO.	TIME	COORD	FIX ACQTY	FIX CAT NA	ACQTY MET	FIX LVL	FLT DIR	VEL	WIND BRG	WIND MNG	MAX OBS SFC WIND VEL	MAX OBS WIND BRG	WIND MNG	UBS MIN SLP	MIN T00MB	FLY LVL	FLY TI/TO	EYE FORM	UNION- TATION	EYE DIA	POSIT OF MAUAN	MSN NMHH
1	010010Z	17.5N 156.0E	SAT																			
2	012135Z	16.5N 154.0E	SAT																			
3	012000Z	16.5N 154.0E	SAT																			
4	012000Z	16.5N 151.8E	SAT																			
5	012000Z	16.5N 152.4E	SAT																			
6	010000Z	17.1N 152.2E	SAT																			
7	010000Z	16.5N 151.8E	SAT																			
8	011000Z	16.5N 152.1E	SAT																			
9	011013Z	17.2N 151.4E	SAT																			
10	011136Z	17.1N 151.6E	SAT																			
11	011136Z	17.4N 151.4E	SAT																			
12	011136Z	17.1N 151.5E	SAT																			
13	012001Z	17.1N 151.4E	SAT																			
14	012005Z	16.5N 150.8E	S																			
15	012009Z	17.5N 151.0E	SAT																			
16	012009Z	16.1N 151.2E	SAT																			
17	012009Z	16.1N 150.5E	SAT																			
18	012009Z	17.4N 150.2E	SAT																			
19	020003Z	16.1N 150.2E	SAT																			
20	020006Z	19.1N 150.6E	SAT																			
21	021100Z	19.4N 150.0E	SAT																			
22	021118Z	19.4N 150.8E	SAT																			
23	021118Z	19.1N 150.0E	SAT																			
24	021118Z	19.4N 149.6E	SAT																			
25	021055Z	19.4N 150.3E	P																			
26	021049Z	19.1N 149.0E	P																			
27	022131Z	19.1N 149.0E	SAT																			
28	022131Z	19.2N 148.5E	SAT																			
29	022138Z	19.3N 149.6E	SAT																			
30	022018Z	19.3N 149.6E	SAT																			
31	022018Z	19.2N 149.7E	SAT																			
32	022033Z	19.5N 149.5E	SAT																			
33	030004Z	19.4N 148.9E	SAT																			
34	030002Z	19.4N 149.4E	P																			
35	030002Z	19.4N 149.3E	P																			
36	030004Z	19.3N 149.2E	SAT																			
37	031009Z	20.1N 149.1E	SAT																			
38	031016Z	19.4N 149.1E	SAT																			
39	031016Z	19.1N 149.2E	SAT																			
40	031009Z	19.7N 149.2E	SAT																			
41	031009Z	20.0N 149.0E	SAT																			
42	031100Z	19.4N 149.2E	SAT																			
43	031002Z	20.1N 149.5E	P																			
44	032119Z	20.6N 149.3E	SAT																			
45	032119Z	20.5N 148.7E	SAT																			
46	032104Z	20.6N 149.1E	SAT																			
47	032033Z	20.0N 149.0E	SAT																			
48	040106Z	21.6N 148.9E	SAT																			
49	040030Z	21.2N 149.0E	P																			
50	040030Z	21.4N 148.3E	P																			

TYphoon TEST
FIX POSITIONS FOR CYCLONE NO. 10
0000Z 02 SEP TO 0000Z 10 SEP

0000Z 02 SEP 78 0000Z 10 SEP 78																					
FIX NO.	TIME	ONSET	FIX CAT	ACQRY MET	FLY LVL	MAX DMS		MAX UMS		UWS MIN SLP	MIN T00MB	FLY LVL	EYE FORM	ORIENT	EYE DIA	POSIT OF HADAR	MSN NMN				
						VEL	WIND	VEL	WIND												
51	041004Z	21.8N 146.6E	SAT	1TH DATA																	
52	041004Z	22.0N 146.2E	SAT	1TH DATA																	
53	041004Z	21.9N 147.4E	SAT	1TH DATA																	
54	041004Z	22.1N 147.3E	SAT	1TH DATA																	
55	041104Z	22.8N 146.0E	SAT	1TH DATA																	
56	041104Z	22.8N 147.8E	P	5	700	260	77	140	35	-		(CONF 01)	261	17	12	EITP	N-S	26A1H			
57	042107Z	23.8N 147.5E	SAT	1TH DATA																	
58	042107Z	23.8N 147.3E	SAT	1TH DATA																	
59	042122Z	23.8N 147.3E	SAT	1TH DATA																	
60	042123Z	23.7N 147.0E	SAT	1TH DATA																	
61	042123Z	23.7N 147.4E	SAT	1TH DATA																	
62	050127Z	23.8N 147.5E	SAT	1TH DATA																	
63	050109Z	24.8N 146.9E	SAT	1TH DATA																	
64	050109Z	24.2N 147.0E	SAT	1TH DATA																	
65	050109Z	24.3N 146.8E	SAT	1TH DATA																	
66	050115Z	24.8N 146.6E	P	5	700	220	80	140	55	50	140	75	447	263	18	15	CTMC	20	7		
67	050115Z	25.8N 145.9E	P	2	5	700	20	76	240	47	35	240	47	448	264	18	11	CTMC	30	7	
68	050124Z	25.3N 146.0E	SAT	1TH DATA																	
69	051104Z	25.2N 146.0E	SAT	1TH DATA																	
70	051104Z	25.6N 145.9E	SAT	1TH DATA																	
71	051104Z	26.8N 145.5E	P	5	700	240	70	140	70	-			450	265	16	14	CTMC	40	8		
72	052104Z	26.8N 145.5E	SAT	1TH DATA																	
73	052104Z	26.8N 145.5E	SAT	1TH DATA																	
74	052104Z	26.8N 145.8E	SAT	1TH DATA																	
75	052104Z	26.8N 145.4E	SAT	1TH DATA																	
76	060107Z	27.8N 145.7E	SAT	1TH DATA																	
77	060107Z	27.8N 145.4E	SAT	1TH DATA																	
78	060107Z	27.8N 145.5E	P	5	700	270	87	180	59	55	140	45	452	267	14	13	EITP	E-W	55A4H	9	
79	060117Z	27.8N 145.7E	SAT	1TH DATA																	
80	060117Z	27.8N 145.7E	SAT	1TH DATA																	
81	060117Z	27.8N 145.7E	SAT	1TH DATA																	
82	061102Z	27.8N 145.7E	SAT	1TH DATA																	
83	061102Z	27.8N 145.7E	SAT	1TH DATA																	
84	061102Z	27.8N 145.7E	SAT	1TH DATA																	
85	061102Z	28.3N 145.5E	P	5	700	270	85	180	60	-			458	272	15	13	-	-	-	10	
86	062102Z	28.3N 145.6E	SAT	1TH DATA																	
87	062102Z	28.3N 146.0E	SAT	1TH DATA																	
88	062102Z	28.3N 145.5E	SAT	1TH DATA																	
89	062102Z	28.3N 145.6E	SAT	1TH DATA																	
90	070117Z	28.3N 144.8E	SAT	1TH DATA																	
91	070117Z	28.3N 145.7E	P	20	700	350	65	260	61	-			469	282	17	15	-	-	-	11	
92	070117Z	28.3N 146.2E	P	10	700	100	70	360	65	55	10	115	466	279	16	14	-	-	-	11	
93	070128Z	28.3N 146.3E	SAT	1TH DATA																	
94	070128Z	28.3N 146.5E	SAT	1TH DATA																	
95	071102Z	28.3N 146.5E	SAT	1TH DATA																	
96	071102Z	28.3N 146.7E	SAT	1TH DATA																	
97	071102Z	28.3N 146.6E	SAT	1TH DATA																	
98	071102Z	28.3N 146.2E	P	5	700	290	65	180	50	-			465	279	13	13	-	-	-	12	
99	072102Z	28.3N 146.4E	SAT	1TH DATA																	
100	072102Z	28.3N 146.5E	SAT	1TH DATA																	
101	072102Z	28.3N 146.6E	SAT	1TH DATA																	
102	072102Z	28.3N 146.8E	SAT	1TH DATA																	
103	080113Z	28.3N 147.0E	SAT	1TH DATA																	
104	080113Z	28.3N 146.6E	P	5	700	-	-	-	55	250	130	469	282	14	12	-	-	-	13		
105	080113Z	30.3N 147.2E	SAT	1TH DATA																	
106	080113Z	30.3N 147.0E	SAT	1TH DATA																	
107	080113Z	30.3N 147.1E	SAT	1TH DATA																	
108	081109Z	30.3N 147.4E	SAT	1TH DATA																	
109	081109Z	30.3N 147.2E	SAT	1TH DATA																	
110	081109Z	30.3N 147.3E	SAT	1TH DATA																	
111	081109Z	31.3N 147.2E	P	10	700	30	55	280	130	-			473	285	15	14	-	-	-	14	
112	082108Z	31.3N 147.8E	SAT	1TH DATA																	
113	082108Z	31.3N 147.9E	SAT	1TH DATA																	
114	082108Z	31.3N 147.7E	SAT	1TH DATA																	
115	082108Z	31.3N 148.0E	SAT	1TH DATA																	
116	082108Z	31.3N 148.0E	SAT	1TH DATA																	
117	082108Z	31.3N 147.8E	SAT	1TH DATA																	
118	090102Z	30.3N 151.3E	SAT	1TH DATA																	
119	090102Z	32.3N 147.7E	P	2	5	700	320	50	260	100	50	260	00	477	289	14	12	-	-	-	15
120	090102Z	32.3N 149.6E	SAT	1TH DATA																	
121	090102Z	32.3N 150.1E	SAT	1TH DATA																	
122	090102Z	32.3N 150.0E	SAT	1TH DATA																	
123	091101Z	32.3N 150.7E	SAT	1TH DATA																	
124	092106Z	32.3N 151.7E	SAT	1TH DATA																	
125	092106Z	32.3N 151.0E	SAT	1TH DATA																	
126	092106Z	32.3N 150.9E	SAT	1TH DATA																	
127	092106Z	32.3N 152.4E	SAT	1TH DATA																	
128	092106Z	32.3N 152.4E	SAT	1TH DATA																	
129	092106Z	32.3N 152.4E	SAT	1TH DATA																	
130	092106Z	30.3N 151.0E	SAT	1TH DATA																	
131	100135Z	30.3N 152.5E	SAT	1TH DATA																	

TROPICAL STORM VIOLA
FIX POSITIONS FOR CYCLONE NO. 11
0000Z 05 SEP TO 0600Z 07 SEP

0000Z 05 SEP TO 0000Z 07 SEP																				
FIX NO.	TIME	POSIT	FIX CAT	ACCHY	FIX LVL	FLT LVL	WIND	MAX UHS	SFC WIND	UHS MIN	MIN SLP	MIN T00MB	FLY LVL	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF MADAH	MSN NMRR		
				NA		MEI	DIR		VEL		BKG		RNG		VEL		RNG		SLP	T00MB	TI/TO
1	011136Z	13.2N 136.7E	SAT	(TH DATA				)	PCN 6	DMSP										
2	012143Z	13.7N 137.7E	SAT	(TH DATA				)	PCN 5	DMSP										
3	012246Z	13.9N 137.4E	SAT	(T 0/1.0 /				/ HRS)	PCN 5	DMSP										
4	021026Z	14.1N 136.7E	SAT	(TH DATA				)	PCN 5	DMSP										
5	022131Z	12.7N 133.3E	SAT	(TH DATA				)	PCN 6	DMSP										
6	022459Z	13.2N 133.4E	SAT	(T 0/1.0 /S				/25HRS)	PCN 5	DMSP										
7	022459Z	14.2N 132.5E	SAT	(T 0/1.0 /				/ HRS)	PCN 5	DMSP										
8	032119Z	13.7N 130.9E	SAT	(T1.0/1.0 /				/ HRS)	PCN 5	DMSP										
9	042320Z	15.4N 130.8E	SAT	(T2.0/2.0 /				/U1.0/24HRS)	NOAA-4		(CONF 01)									
10	042322Z	15.0N 131.4E	SAT	(T2.5/2.5 /				/U1.5/26HRS)	PCN 3	DMSP										
11	042322Z	14.7N 130.3E	SAT	(T2.0/2.0 /				/ HRS)	PCN 5	DMSP										
12	042323Z	14.6N 131.1E	SAT	(T2.5/2.5 /				/ HRS)	PCN 3	DMSP										
13	050308Z	15.0N 130.8E	SAT	(TR DATA				)	PCN 3	DMSP										
14	050308Z	15.0N 131.5E	SAT	(T1.5/1.5 /				/ HRS)	PCN 3	DMSP										
15	050309Z	15.2N 131.1E	SAT	(TR DATA				)	PCN 3	DMSP										
16	050309Z	15.0N 131.0E	SAT	(TH DATA				)	PCN 5	DMSP										
17	050352Z	15.8N 130.7E	SAT	(TH DATA				)	PCN 5	DMSP										
18	051204Z	15.2N 132.0E	SAT	(TH DATA				)	PCN 5	DMSP										
19	051204Z	16.0N 131.5E	SAT	(TH DATA				)	PCN 5	DMSP										
20	052115Z	16.0N 131.8E	P	5	2	700	170	40	30	60	40	30	60	997	306	12	9	CTWC	50	1
21	052236Z	16.1N 132.8E	SAT	(TH DATA				)	PCN 5	DMSP										
22	052304Z	16.4N 131.7E	SAT	(T4.0/4.0 /				/U1.5/24HRS)	PCN 3	DMSP										
23	052304Z	16.4N 132.0E	SAT	(T3.0/3.0 /				/U1.0/24HRS)	PCN 5	DMSP										
24	060015Z	16.2N 131.6E	SAT	(T3.0/3.0 /				/U1.0/25HRS)	NOAA-4		(CONF 01)									
25	060246Z	16.4N 132.3E	P	3	2	700	330	40	260	35	65	340	30	996	305	13	10	CTWC	15	1
26	060250Z	16.4N 132.5E	SAT	(TH DATA				)	PCN 3	DMSP										
27	060250Z	16.4N 132.1E	SAT	(TH DATA				)	PCN 5	DMSP										
28	060250Z	16.7N 132.8E	SAT	(T2.5/2.5 /				/U1.0/24HRS)	PCN 4	DMSP										
29	060403Z	17.9N 132.9E	P	10	5	700	180	40	270	25	40	270	20	997	307	11	10	CTWC	15	2
30	060403Z	16.7N 133.0E	SAT	(TH DATA				)	PCN 3	DMSP										
31	061059Z	19.2N 133.6E	SAT	(TH DATA				)	NOAA-4		(CONF 02)									
32	061146Z	18.1N 133.1E	SAT	(TH DATA				)	PCN 5	DMSP										
33	061146Z	17.4N 133.2E	SAT	(TH DATA				)	PCN 5	DMSP										
34	061432Z	18.1N 133.3E	P	10	20	700	60	30	330	30	-	-	-	999	308	10	-	-	-	2
35	062244Z	19.1N 133.6E	SAT	(TH DATA				)	PCN 5	DMSP										
36	062246Z	19.1N 133.9E	SAT	(T2.0/3.0 /				/W2.0/24HRS)	PCN 5	DMSP										
37	062246Z	19.2N 134.3E	SAT	(T3.0/3.0 /S				/24HRS)	PCN 5	DMSP										
38	070241Z	19.4N 134.5E	SAT	(TH DATA				)	PCN 5	DMSP										
39	070241Z	20.2N 134.5E	SAT	(TH DATA				)	PCN 3	DMSP										
40	070241Z	20.2N 134.0E	SAT	(T1.5/2.0 /				/W1.0/24HRS)	PCN 6	DMSP										
41	070222Z	19.2N 134.2E	P	3	6	700	-	-	-	25	310	60	-	310	13	11	-	-	-	3
42	072227Z	20.7N 137.4E	SAT	(T1.0/2.0 /				/W2.0/24HRS)	PCN 3	DMSP										
43	080241Z	21.0N 138.8E	SAT	(T 4.5/1.5 /				/W1.0/24HRS)	PCN 6	DMSP										

TYphoon WINNIE
FIX POSITIONS FOR CYCLONE NO. 12
0000Z 09 SEP TO 0000Z 12 SEP

FIX NO.	TIME	POSIT	FIX CAT	ACCHY	FIX LVL	FLI DIR	LVL VEL	WIND BHR	WIND RRG	MAX UHS SFC WIND VEL	MAX UHS WIND RRG	UHS MIN SLP	MIN T00MB MGT	FLY LVL TI/TO	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF MADAH	MSN NMRR
1	050127Z	22.5N 161.7E	SAT	(T 0/1.0 /							PCN 6	DMSP							
2	072227Z	22.8N 163.1E	SAT	(T1.0/1.0 /							PCN 3	DMSP							
3	080213Z	23.3N 163.0E	SAT	(T1.0/1.0 /							PCN 4	DMSP							
4	080401Z	24.7N 162.9E	SAT	(TH DATA							NOAA-4		(CONF 01)						
5	080416Z	24.1N 163.6E	SAT	(TH DATA							PCN 5	DMSP							
6	080416Z	23.4N 163.5E	SAT	(TH DATA							PCN 5	DMSP							
7	081109Z	23.4N 163.8E	SAT	(TH DATA							PCN 5	DMSP							
8	082018Z	25.4N 163.8E	SAT	(TH DATA							PCN 5	DMSP							
9	082018Z	24.8N 163.9E	SAT	(TH DATA							PCN 6	DMSP							
10	082209Z	25.4N 163.8E	SAT	(T2.0/2.0 /							PCN 3	DMSP							
11	082209Z	25.4N 163.6E	SAT	(T2.0/2.0 /U1.0/24HRS)							PCN 3	DMSP							
12	090154Z	26.1N 164.3E	SAT	(TH DATA							PCN 4	DMSP							
13	090154Z	26.1N 163.9E	SAT	(TH DATA							PCN 4	DMSP							
14	090403Z	27.4N 163.7E	SAT	(TH DATA							PCN 6	DMSP							
15	090403Z	24.0N 163.9E	SAT	(TH DATA							PCN 4	DMSP							
16	090403Z	27.4N 163.9E	SAT	(TH DATA							PCN 6	DMSP							
17	090403Z	27.2N 163.5E	SAT	(TH DATA							NOAA-4		(CONF 01)						
18	091050Z	27.5N 164.0E	SAT	(TR DATA							PCN 4	DMSP							
19	091051Z	24.1N 163.8E	SAT	(TH DATA							PCN 4	DMSP							
20	092006Z	29.4N 162.7E	SAT	(TH DATA							PCN 4	DMSP							
21	092006Z	24.1N 163.2E	SAT	(TH DATA							PCN 4	DMSP							
22	092112Z	29.6N 162.9E	SAT	(T4.0/4.0 /U2.0/24HRS)							PCN 1	DMSP							
23	092112Z	29.4N 163.0E	SAT	(T4.0/4.0 /							PCN 3	DMSP							
24	092112Z	29.7N 163.2E	SAT	(T4.0/4.0 /U2.0/24HRS)							PCN 1	DMSP							
25	100135Z	30.4N 163.0E	SAT	(T4.0/4.0 /							PCN 4	DMSP							
26	100451Z	32.1N 163.0E	SAT	(TH DATA							PCN 4	DMSP							
27	100455Z	28.0N 163.5E	SAT	(TH DATA							NOAA-4		(CONF 01)						
28	101042Z	31.4N 162.7E	SAT	(TH DATA							PCN 3	DMSP							
29	101042Z	32.2N 162.9E	SAT	(TH DATA							PCN 4	DMSP							
30	102132Z	34.1N 162.3E	SAT	(T4.0/4.0 /S							PCN 1	DMSP							
31	102132Z	33.9N 162.7E	SAT	(T2.5/3.5 /W1.5/24HRS)							PCN 3	DMSP							
32	110117Z	35.4N 163.4E	SAT	(T4.0/4.0 /S							PCN 2	DMSP							
33	111014Z	34.4N 164.0E	SAT	(TH DATA							PCN 2	DMSP							
34	112114Z	42.1N 164.4E	SAT	(T1.0/2.0 /W1.5/24HRS)							PCN 3	DMSP							

FIX POSITIONS FOR CYCLONE NO. 13
0000Z 16 SEP TO 0000Z 20 SEP

FIX NO.	TIME	POSN	FIX CAT	ACQTY	FIX NAME	LVL	DIR	VEL	WIND	MAX UHS	SFC WIND	MIN SLP	TWO MM	FLY T/TO	FLY FROM	ORIGIN- TATION	EYE DIA	POSN OF MAUW	MSA NM-M	
1	112256Z	12.2N 147.8E	SAT	1	071.0	/	/	MS	PCN 5	DMSP										
2	112256Z	12.3N 147.7E	SAT	1	071.0	/	/	MS	PCN 5	DMSP										
3	121009Z	11.1N 147.8E	SAT	1	071.0	/	/	MS	PCN 5	DMSP										
4	122237Z	10.1N 139.7E	SAT	1	071.0	/S	/24MS		PCN 3	DMSP										
5	130457Z	9.8N 139.4E	SAT	1	071.0	/	/	MS	PCN 5	DMSP										
6	131118Z	10.0N 139.0E	SAT	1	071.0	/	/	MS	PCN 5	DMSP										
7	132100Z	9.7N 139.8E	SAT	1	071.0	/	/	MS	PCN 5	DMSP										
8	140000Z	9.5N 136.7E	SAT	1	071.0	/01.0/25MS			PCN 3	DMSP										
9	140456Z	11.1N 135.5E	SAT	1	071.0	/	/	MS	PCN 6	DMSP										
10	140456Z	11.1N 135.8E	SAT	1	071.0	/	/	MS	PCN 6	DMSP										
11	142326Z	11.1N 131.6E	SAT	1	071.0	/S	/24MS		PCN 5	DMSP										
12	151115Z	13.1N 131.2E	SAT	1	071.0	/	/	MS	PCN 5	DMSP										
13	151224Z	13.1N 131.0E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
14	151224Z	13.2N 131.4E	SAT	1	071.0	/	/	MS	PCN 5	DMSP										
15	152218Z	14.4N 130.0E	SAT	1	071.0	/	/	MS	PCN 5	DMSP										
16	152218Z	13.4N 129.9E	SAT	1	071.0	/	/	MS	PCN 5	DMSP										
17	152224Z	13.1N 129.8E	SAT	1	071.0	/01.0/24MS			PCN 5	DMSP										
18	152224Z	13.1N 129.4E	SAT	1	071.0	/	/	MS	PCN 5	DMSP										
19	152251Z	14.8N 129.4E	SAT	1	071.0	/01.0/23MS			PCN 5	DMSP										
20	160035Z	14.1N 128.8E	P	5	1500	80	45	300	NOAA-4											
21	160037Z	13.9N 128.3E	SAT	1	071.0	/	/	MS	PCN 5	DMSP										
22	160037Z	13.9N 129.0E	SAT	1	071.0	/	/	MS	PCN 5	DMSP										
23	160037Z	13.9N 129.1E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
24	161103Z	14.0N 127.6E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
25	161103Z	14.0N 127.7E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
26	161205Z	14.1N 127.4E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
27	161205Z	13.1N 127.9E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
28	161205Z	14.1N 127.3E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
29	161115Z	14.3N 126.6E	P	5	5	700	140	50	60	30	-	-	1003	311	14	9	CTMC	20	3	
30	162055Z	14.5N 125.8E	P	5	10	700	20	40	290	70	-	-	996	305	13	11	CTMC	30	3	
31	162057Z	14.6N 125.6E	SAT	1	071.0	/04.0/23MS			PCN 3	DMSP										
32	162206Z	14.6N 125.7E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
33	170046Z	15.0N 124.1E	SAT	1	071.0	/03.5/25MS			PCN 3	DMSP										
34	170047Z	14.8N 125.4E	SAT	1	071.0	/03.0/25MS			PCN 3	DMSP										
35	170047Z	14.8N 124.7E	P	2	5	700	220	50	160	45	65	330	30	987	298	14	10	CTMC	20	4
36	170224Z	14.9N 124.5E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
37	170224Z	14.4N 124.7E	SAT	1	071.0	/03.5/25MS			PCN 3	DMSP										
38	170400Z	15.1N 124.2E	LRUN	-	35	700	120	85	70	15	75	70	15	975	287	15	10	CTMC	20	5
39	170456Z	15.1N 123.9E	P	2	1	700	120	85	70	15	75	70	15	975	287	15	10	CTMC	20	5
40	170400Z	15.2N 123.6E	LRUN	-	10	DEGREE SPIRAL OVERLAY														
41	171051Z	15.2N 123.6E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
42	171051Z	15.6N 123.6E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
43	171051Z	15.1N 123.5E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
44	171100Z	15.6N 123.4E	LRUN	-	55	700	120	85	70	15	75	70	15	975	287	15	10	CTMC	20	5
45	171228Z	15.2N 122.7E	SAT	1	071.0	/	/	MS	PCN 5	DMSP										
46	171230Z	15.7N 123.3E	LRUN	-	1030															
47	171230Z	15.1N 123.2E	LRUN	-	2040															
48	171230Z	15.1N 123.0E	SAT	1	071.0	/	/	MS	PCN 5	DMSP										
49	171430Z	15.4N 122.7E	P	3	2	700	150	105	40	15	-	-	971	284	19	12	CTMC	12	5	
50	171700Z	15.1N 122.4E	LRUN	-	1079															
51	171700Z	15.4N 121.9E	LRUN	-	10712															
52	172357Z	16.3N 120.8E	SAT	1	071.0	/	/	MS	PCN 5	DMSP										
53	180000Z	16.4N 120.7E	LRUN	-	35	700	120	85	70	15	75	70	15	975	287	15	10	CTMC	20	5
54	180028Z	16.3N 120.0E	SAT	1	071.0	/04.0/25MS			PCN 3	DMSP										
55	180028Z	16.9N 120.4E	SAT	1	071.0	/04.0/25MS			PCN 3	DMSP										
56	180300Z	17.1N 119.4E	LRUN	-	119															
57	180400Z	16.5N 119.3E	LRUN	-	POSSIBLE EYE, 20 DEGREE SPIRAL OVERLAY															
58	180400Z	17.0N 118.9E	LRUN	-	119															
59	180411Z	17.0N 118.7E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
60	180411Z	16.7N 118.8E	SAT	1	071.0	/	/	MS	PCN 4	DMSP										
61	181224Z	16.4N 117.5E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
62	181410Z	16.4N 116.6E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
63	181440Z	16.1N 116.4E	P	20	15	700	140	60	30	100	-	-	993	303	12	12	CTMC	20	6	
64	182237Z	17.3N 114.9E	SAT	1	071.0	/	/	MS	PCN 5	DMSP										
65	190010Z	17.1N 113.9E	SAT	1	071.0	/04.0/25MS			PCN 3	DMSP										
66	190010Z	17.2N 114.4E	SAT	1	071.0	/04.0/25MS			PCN 3	DMSP										
67	190040Z	17.9N 114.0E	SAT	1	071.0	/04.0/23MS			PCN 3	DMSP										
68	190522Z	17.4N 113.3E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
69	190522Z	17.2N 113.5E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
70	190522Z	17.4N 113.1E	SAT	1	071.0	/00.5/24MS			PCN 4	DMSP										
71	191208Z	18.4N 111.5E	SAT	1	071.0	/	/	MS	PCN 2	DMSP										
72	191209Z	18.5N 111.4E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
73	191222Z	18.4N 110.9E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
74	191222Z	18.1N 111.0E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
75	191222Z	18.3N 111.0E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
76	192111Z	18.8N 108.5E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
77	192111Z	18.7N 108.6E	SAT	1	071.0	/00.5/24MS			PCN 6	DMSP										
78	200133Z	19.2N 108.4E	SAT	1	071.0	/03.0/25MS			PCN 3	DMSP										
79	201156Z	19.7N 105.6E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
80	201157Z	19.4N 106.1E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
81	201414Z	19.5N 105.7E	SAT	1	071.0	/	/	MS	PCN 3	DMSP										
82	210115Z	20.2N 102.6E	SAT	1	071.0	/	/	MS	PCN 5	DMSP										

FIX POSITIONS FOR CYCLONE NO. 14
0600Z 17 SEP TO 1200Z 23 SEP

[illegible]

STORMON PETTY
FIX POSITIONS FOR CYCLONE NO. 14
0600Z 17 SEP TO 1200Z 23 SEP

FIX NO.	TIME	COORDS	FIX CAT	A-CHKY	FIX LVL	FLT LVL	WTD	MAX UDS	MAX UDS	UDS MIN	MIN	FLY	FLY	FLY	ORIENT	EYE	POSIT	MSH
						DIR	VEL	HRG	HRG	SLP	MG	TS/TO	FORM	TATION	UJA			
92	21100Z	22.8N 125.9E	LRUH	-	22013												26.8N 125.3E	
93	21100Z	22.8N 125.9E	LRUH	-	05773												26.8N 125.3E	
94	21100Z	22.8N 125.9E	P	2	700	220	70	160	30	-	-	-	952	267	17 13	CTMC	20	11
95	21100Z	22.8N 125.9E	LRUH	-	05773												26.8N 125.3E	
96	21100Z	22.8N 125.9E	LRUH	-	05772												26.3N 124.0E	
97	21100Z	22.8N 125.9E	LRUH	-	05773												26.3N 124.0E	
98	21100Z	22.8N 125.9E	LRUH	-	21013												26.8N 125.3E	
99	21100Z	22.8N 125.9E	LRUH	-	05772												26.3N 124.0E	
100	21100Z	22.8N 125.9E	LRUH	-	41013												26.8N 125.3E	
101	21100Z	22.8N 125.9E	LRUH	-	05772												26.3N 124.0E	
102	21100Z	22.8N 125.9E	LRUH	-	41013												26.8N 125.3E	
103	21100Z	22.8N 125.9E	LRUH	-	05772												26.3N 124.0E	
104	21100Z	22.8N 125.9E	LRUH	-	41013												26.8N 125.3E	
105	21200Z	22.8N 125.9E	LRUH	-	05443												26.8N 125.3E	
106	21200Z	22.8N 125.9E	P	10	2	700	300	70	220	30	-	-	-	950	266	18 15	CTMC	15
107	21200Z	22.8N 125.9E	LRUH	-	05773												26.8N 125.3E	
108	21200Z	22.8N 125.9E	LRUH	-	05443												26.8N 125.3E	
109	21200Z	22.8N 125.9E	SAT	(15.0/5.0-75	(23.0/5.0)												26.8N 125.3E	
110	21200Z	22.8N 125.9E	SAT	(15.0/5.0-75	(23.0/5.0)												26.8N 125.3E	
111	21200Z	22.8N 125.9E	SAT	(15.0/5.0-75	(23.0/5.0)												26.8N 125.3E	
112	21200Z	22.8N 125.9E	LRUH	-	05773												26.3N 124.0E	
113	21200Z	22.8N 125.9E	LRUH	-	10413												26.8N 125.3E	
114	21200Z	22.8N 125.9E	SAT	(15.0/5.0-75	(23.0/5.0)												26.8N 125.3E	
115	21200Z	22.8N 125.9E	SAT	(15.0/5.0-75	(23.0/5.0)												26.8N 125.3E	
116	21200Z	22.8N 125.9E	SAT	(15.0/5.0-75	(23.0/5.0)												26.8N 125.3E	
117	22000Z	22.8N 125.9E	SAT	(15.0/5.0-75	(23.0/5.0)												26.8N 125.3E	
118	22000Z	22.8N 125.9E	LRUH	-	05773												26.8N 125.3E	
119	22000Z	22.8N 125.9E	LRUH	-	05772												26.3N 124.0E	
120	22000Z	22.8N 125.9E	LRUH	-	20403												26.8N 125.3E	
121	22000Z	22.8N 125.9E	LRUH	-	05772												26.3N 124.0E	
122	22000Z	22.8N 125.9E	LRUH	-	10412												26.8N 125.3E	
123	22000Z	22.8N 125.9E	P	3	2	700	100	110	330	60	80	330	15	944	260	20 12	CTMC	15
124	22000Z	22.8N 125.9E	LRUH	-	05772												26.3N 124.0E	
125	22000Z	22.8N 125.9E	LRUH	-	10413												26.8N 125.3E	
126	22000Z	22.8N 125.9E	LRUH	-	10422												26.8N 125.3E	
127	22000Z	22.8N 125.9E	LRUH	-	05772												26.3N 124.0E	
128	22000Z	22.8N 125.9E	LRUH	-	10414												26.8N 125.3E	
129	22000Z	22.8N 125.9E	SAT	(15.0/5.0-75	(23.0/5.0)												26.8N 125.3E	
130	22000Z	22.8N 125.9E	SAT	(15.0/5.0-75	(23.0/5.0)												26.8N 125.3E	
131	22000Z	22.8N 125.9E	LRUH	-	10412												26.8N 125.3E	
132	22000Z	22.8N 125.9E	LRUH	-	20402												26.8N 125.3E	
133	22000Z	22.8N 125.9E	LRUH	-	10412												26.8N 125.3E	
134	22000Z	22.8N 125.9E	LRUH	-	10414												26.8N 125.3E	
135	22000Z	22.8N 125.9E	LRUH	-	05772												26.3N 124.0E	
136	22000Z	22.8N 125.9E	LRUH	-	05773												26.8N 125.3E	
137	22000Z	22.8N 125.9E	LRUH	-	05772												26.3N 124.0E	
138	22000Z	22.8N 125.9E	LRUH	-	05773												26.8N 125.3E	
139	22000Z	22.8N 125.9E	LRUH	-	13611												26.8N 125.3E	
140	22100Z	22.8N 125.9E	SAT	(15.0/5.0-75	(23.0/5.0)												26.8N 125.3E	
141	22100Z	22.8N 125.9E	SAT	(15.0/5.0-75	(23.0/5.0)												26.8N 125.3E	
142	22100Z	22.8N 125.9E	LRUH	-	25711												26.8N 125.3E	
143	22100Z	22.8N 125.9E	LRUH	-	05711												26.8N 125.3E	
144	22100Z	22.8N 125.9E	LRUH	-	05711												26.8N 125.3E	
145	22100Z	22.8N 125.9E	LRUH	-	05711												26.8N 125.3E	
146	22100Z	22.8N 125.9E	LRUH	-	05711												26.8N 125.3E	
147	22200Z	22.8N 125.9E	LRUH	-	05711												26.8N 125.3E	
148	22200Z	22.8N 125.9E	SAT	(13.5/4.5-75	(21.5/2.5-75)												26.8N 125.3E	
149	22200Z	22.8N 125.9E	SAT	(13.5/4.5-75	(21.5/2.5-75)												26.8N 125.3E	
150	22200Z	22.8N 125.9E	SAT	(13.5/4.5-75	(21.5/2.5-75)												26.8N 125.3E	
151	22200Z	22.8N 125.9E	LRUH	-	05711												26.8N 125.3E	
152	23000Z	23.8N 118.0E	SAT	(13.5/4.5-75	(21.5/2.5-75)												26.8N 125.3E	
153	23000Z	23.8N 118.0E	LRUH	-	05711												26.8N 125.3E	
154	23000Z	23.8N 118.0E	SAT	(13.5/4.5-75	(21.5/2.5-75)												26.8N 125.3E	
155	23000Z	23.8N 118.0E	SAT	(13.5/4.5-75	(21.5/2.5-75)												26.8N 125.3E	
156	23000Z	23.8N 118.0E	LRUH	-	05711												26.8N 125.3E	
157	23000Z	23.8N 118.0E	LRUH	-	05711												26.8N 125.3E	
158	23100Z	23.8N 118.0E	SAT	(13.5/4.5-75	(21.5/2.5-75)												26.8N 125.3E	
159	23100Z	23.8N 118.0E	SAT	(13.5/4.5-75	(21.5/2.5-75)												26.8N 125.3E	
160	24000Z	23.8N 118.0E	SAT	(13.5/4.5-75	(21.5/2.5-75)												26.8N 125.3E	

TYPHOON CORA
 FIX POSITIONS FOR CYCLONE NO. 15
 0600Z 01 OCT TO 0600Z 06 OCT

FIX NO.	TIME	POSN	FIX CAT	ARCHY	FIX LVL	MAX OBS				MAX OBS			OBS MIN SLP	MIN 700MS MGT	FLT LVL TI/TO	EYE FORM	ORIENT	EYE DIA	POSIT OF NAUAK	MSN NMHR
						DIR	VEL	HRG	RNG	VEL	HRG	RNG								
1	282248Z	10.2N 142.8E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
2	291008Z	10.2N 141.7E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
3	291008Z	10.2N 141.7E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
4	291130Z	10.2N 141.6E	SAT			(11.0/1.0 / / HUS)				PCN 6	DMSP									
5	291130Z	10.2N 142.0E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
6	292110Z	10.2N 138.9E	SAT			(11.0/1.0 / / HUS)				PCN 6	DMSP									
7	300011Z	10.2N 138.5E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
8	300011Z	10.2N 138.6E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
9	300056Z	10.2N 136.6E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
10	300056Z	10.2N 136.6E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
11	301111Z	10.2N 136.3E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
12	301111Z	10.2N 137.0E	SAT			(11.0/1.0 / / HUS)				PCN 6	DMSP									
13	302240Z	12.2N 133.6E	SAT			(12.5/2.5 /01.5/24HRS)				PCN 5	DMSP									
14	302353Z	13.2N 133.9E	SAT			(12.5/2.5 /01.5/24HRS)				PCN 5	DMSP									
15	302353Z	13.2N 133.9E	SAT			(12.5/2.5 /01.5/24HRS)				PCN 5	DMSP									
16	010012Z	14.2N 134.0E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
17	010407Z	13.8N 133.3E	P	5	15	1500	180	34	250	75	35	250	100	1001	-	23	23	-	-	2
18	010826Z	14.2N 134.0E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
19	010831Z	14.2N 132.4E	P	5	10	700	40	28	310	150	20	310	200	999	308	11	10	-	-	2
20	010943Z	14.2N 132.9E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
21	010943Z	15.2N 133.2E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
22	011054Z	13.8N 134.4E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
23	011234Z	15.2N 133.4E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
24	011234Z	15.2N 133.2E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
25	011234Z	15.2N 134.2E	SAT			(11.0/1.0 / / HUS)				PCN 6	DMSP									
26	011552Z	15.6N 132.4E	P	5	20	700	170	35	110	170	-	-	1001	309	11	11	-	-	3	
27	012052Z	16.8N 131.8E	P	5	10	700	330	22	250	25	-	-	-	308	11	10	-	-	3	
28	012228Z	16.9N 132.1E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
29	012311Z	17.2N 132.7E	SAT			(13.0/3.0 /01.5/24HRS)				PCN 5	DMSP									
30	012342Z	17.2N 132.2E	SAT			(13.0/3.0 /00.5/24HRS)				PCN 3	DMSP									
31	012342Z	17.2N 132.6E	SAT			(13.0/3.0 /01.0/24HRS)				PCN 3	DMSP									
32	012342Z	17.2N 132.4E	SAT			(12.0/2.0 / / HUS)				PCN 5	DMSP									
33	020013Z	18.8N 131.8E	SAT			(11.0/1.0 / / HUS)				PCN 3	DMSP									
34	020013Z	18.7N 132.2E	SAT			(11.0/1.0 / / HUS)				PCN 3	DMSP									
35	020013Z	18.2N 132.1E	SAT			(12.5/2.5 /01.0/24HRS)				PCN 4	DMSP									
36	020040Z	18.9N 131.6E	P	5	2	700	170	45	70	20	35	320	15	997	306	14	11	-	-	4
37	021113Z	20.2N 131.0E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
38	021113Z	19.2N 131.5E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
39	021216Z	20.2N 130.8E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
40	021216Z	20.2N 131.4E	SAT			(11.0/1.0 / / HUS)				PCN 5	DMSP									
41	021430Z	20.2N 130.7E	P	5	5	700	130	48	50	60	-	-	-	309	15	10	-	-	4	
42	022216Z	21.7N 129.6E	SAT			(11.0/1.0 / / HUS)				PCN 3	DMSP									
43	022216Z	21.3N 129.7E	SAT			(11.0/1.0 / / HUS)				PCN 3	DMSP									
44	022316Z	21.7N 129.3E	SAT			(14.0/4.0 /01.0/24HRS)				PCN 3	DMSP									
45	022316Z	21.2N 129.7E	SAT			(14.0/4.0 /01.0/24HRS)				PCN 3	DMSP									
46	030004Z	21.2N 129.1E	SAT			(14.0/4.0 /01.0/24HRS)				PCN 3	DMSP									
47	030004Z	22.1N 129.5E	SAT			(11.0/1.0 / / HUS)				PCN 3	DMSP									
48	030004Z	22.2N 129.5E	SAT			(11.0/1.0 / / HUS)				PCN 3	DMSP									
49	030004Z	22.2N 128.9E	SAT			(13.5/3.5 /01.0/24HRS)				PCN 4	DMSP									
50	030044Z	22.2N 129.4E	P	5	5	700	200	80	120	7	70	140	8	977	289	17	12	CTMC	25	6
51	030040Z	23.1N 129.3E	P	3	3	700	30	90	340	34	80	330	30	966	279	16	10	CTMC	20	6
52	031100Z	23.2N 129.3E	LRUN			- 20902													26.1N 127.0E	
53	031101Z	23.1N 129.6E	SAT			(11.0/1.0 / / HUS)				PCN 3	DMSP									
54	031101Z	23.5N 129.3E	SAT			(11.0/1.0 / / HUS)				PCN 3	DMSP									
55	031101Z	23.6N 129.4E	SAT			(11.0/1.0 / / HUS)				PCN 1	DMSP									
56	031158Z	23.8N 129.4E	SAT			(11.0/1.0 / / HUS)				PCN 3	DMSP									
57	031158Z	23.4N 129.2E	SAT			(11.0/1.0 / / HUS)				PCN 3	DMSP									
58	031158Z	23.4N 129.3E	SAT			(11.0/1.0 / / HUS)				PCN 3	DMSP									
59	031000Z	23.7N 129.2E	LRUN			- 12912													26.1N 127.0E	
60	031000Z	23.4N 129.2E	LRUN			- 22912													26.1N 127.0E	
61	031000Z	23.4N 129.2E	LRUN			- 52912													26.1N 127.0E	
62	031054Z	24.2N 129.2E	P	7	5	700	220	90	140	25	-	-	966	279	17	14	ETIP SW-NE	25X15	7	
63	031000Z	24.1N 129.2E	LRUN			- 52912													26.1N 127.0E	
64	031000Z	24.1N 129.2E	LRUN			- 20912													26.1N 127.0E	
65	031000Z	24.2N 129.2E	LRUN			- 20912													26.1N 127.0E	
66	031000Z	24.2N 129.3E	LRUN			- 20912													26.1N 127.0E	
67	031000Z	24.2N 129.3E	LRUN			- 20912													26.1N 127.0E	
68	032030Z	25.1N 129.3E	P	5	5	700	-	-	-	-	-	-	948	264	20	15	CTMC	20	8	
69	032100Z	25.4N 129.4E	LRUN			- 20942													26.1N 127.0E	
70	032000Z	25.6N 129.5E	LRUN			- 20942													26.1N 127.0E	
71	032004Z	25.8N 129.5E	SAT			(11.0/1.0 / / HUS)				PCN 2	DMSP									
72	032004Z	25.1N 129.7E	SAT			(11.0/1.0 / / HUS)				PCN 1	DMSP									
73	032004Z	25.1N 129.5E	SAT			(11.0/1.0 / / HUS)				PCN 1	DMSP									
74	032057Z	25.6N 129.6E	SAT			(15.0/5.0 /01.0/24HRS)				PCN 1	DMSP									
75	032058Z	25.7N 129.6E	SAT			(15.0/5.0 /01.0/24HRS)				PCN 2	DMSP									
76	032058Z	25.8N 129.7E	SAT			(15.0/5.0 /01.0/24HRS)				PCN 1	DMSP									

TYPHOON CORA
 FIX POSITIONS FOR CYCLONE NO. 15
 0600Z 01 OCT TO 0600Z 06 OCT

FIX NO.	TIME	COORD	FIX ACCT	CAT	NO.	MET	LVL	DIR	VEL	WIND	RNG	RNG	MAX UHS	MAX UHS	UHS	MIN	700MH	LVL	EYE	ORIENT	TATION	EYE	DIA	POSIT	OF	MS
81	040500Z	27.4N 130.2E	LROR	-	21842																			28.4N 127.8E		
82	040500Z	27.4N 130.2E	LROR	-	22842																			28.4N 129.5E		
83	040700Z	27.4N 130.2E	LROR	-	22912																			28.4N 129.5E		
84	040900Z	28.4N 130.2E	LROR	-	22773																			30.6N 131.0E		
85	040900Z	28.4N 130.2E	LROR	-	22912																			28.4N 129.5E		
86	040900Z	28.4N 130.2E	LROR	-	21863																			30.6N 131.0E		
87	040900Z	28.4N 131.0E	LROR	-	22912																			28.4N 129.5E		
88	041000Z	28.4N 131.0E	LROR	-	22944																			30.6N 131.0E		
89	041000Z	28.4N 131.0E	LROR	-	22912																			28.4N 129.5E		
100	041049Z	28.4N 131.3E	SAT	(IN DATA									1	PCN 2	DMSP											
101	041049Z	28.4N 131.3E	SAT	(IN DATA									1	PCN 1	DMSP											
102	041049Z	28.4N 131.3E	SAT	(IN DATA									1	PCN 2	DMSP											
103	041100Z	28.4N 131.2E	LROR	-	21912																			28.4N 129.5E		
104	041100Z	28.4N 131.1E	LROR	-	22944																			30.6N 131.0E		
105	041149Z	28.4N 131.3E	SAT	(IN DATA									1	PCN 1	DMSP											
106	041200Z	28.4N 131.4E	LROR	-	22912																			28.4N 129.5E		
107	041200Z	28.4N 131.3E	LROR	-	22913																			30.6N 131.0E		
108	041200Z	28.4N 131.3E	LROR	-	22912																			28.4N 129.5E		
109	041200Z	28.4N 131.3E	LROR	-	22913																			30.6N 131.0E		
110	041212Z	28.4N 131.3E	SAT	(IN DATA									1	PCN 1	DMSP											
111	041200Z	28.4N 131.3E	LROR	-	22912																			28.4N 129.5E		
112	041200Z	28.4N 131.3E	LROR	-	22913																			30.6N 131.0E		
113	041200Z	28.4N 131.3E	LROR	-	22912																			28.4N 129.5E		
114	041200Z	28.4N 131.3E	LROR	-	22913																			30.6N 131.0E		
115	041200Z	28.4N 131.3E	P	7	5	700										944	260	15	11	CTWC						10
116	041200Z	28.4N 131.3E	LROR	-	22913																			30.6N 131.0E		
117	041200Z	28.4N 131.3E	LROR	-	22912																			28.4N 129.5E		
118	041200Z	30.6N 131.5E	LROR	-	22913																			30.6N 131.0E		
119	041200Z	30.6N 131.5E	LROR	-	22915																			30.6N 131.0E		
120	041200Z	30.6N 131.5E	P	5	3	700										943	259	16	10	CTWC						10
121	041200Z	30.6N 131.5E	LROR	-	22916																			30.6N 131.0E		
122	041200Z	30.6N 131.5E	LROR	-	22912																			33.3N 134.2E		
123	041200Z	31.4N 134.9E	SAT	(IN DATA									1	PCN 2	DMSP											
124	041200Z	31.4N 134.9E	SAT	(IN DATA									1	PCN 1	DMSP											
125	041200Z	31.4N 134.9E	SAT	(TS.0/5.0-25									1	PCN 1	DMSP											
126	041200Z	31.4N 134.9E	LROR	-	22912																			33.3N 134.2E		
127	041200Z	31.4N 134.9E	LROR	-	22912																			30.6N 131.0E		
128	041200Z	31.4N 134.9E	SAT	(TS.0/5.0-25									1	PCN 1	DMSP											
129	041200Z	31.4N 134.9E	SAT	(TS.0/5.0-25									1	PCN 1	DMSP											
130	041200Z	31.4N 134.9E	SAT	(IN DATA									1	PCN 1	DMSP											
131	041200Z	31.4N 134.9E	LROR	-	22912																			33.3N 134.2E		
132	041200Z	31.4N 134.9E	LROR	-	22912																			30.6N 131.0E		
133	050000Z	31.6N 135.5E	LROR	-	22912																			33.3N 134.2E		
134	050100Z	32.6N 136.1E	LROR	-	22912																			33.3N 134.2E		
135	050200Z	32.6N 136.7E	LROR	-	22912																			35.4N 138.7E		
136	050200Z	32.6N 136.7E	LROR	-	22912																			33.3N 134.2E		
137	050217Z	32.6N 136.8E	SAT	(IN DATA									1	PCN 1	DMSP											
138	050217Z	32.6N 136.8E	SAT	(IN DATA									1	PCN 1	DMSP											
139	050300Z	32.6N 137.1E	LROR	-	22912																			35.4N 138.7E		
140	050300Z	32.6N 137.2E	LROR	-	22912																			33.3N 134.2E		
141	050300Z	32.6N 137.2E	P	5	5	700										946	262	20	13	CTWC						11
142	050300Z	32.6N 137.2E	LROR	-	22912																			33.3N 134.2E		
143	050300Z	32.6N 137.2E	LROR	-	22912																			35.4N 138.7E		
144	050300Z	32.6N 137.2E	LROR	-	22912																			35.4N 138.7E		
145	050300Z	32.6N 137.2E	LROR	-	22912																			35.4N 138.7E		
146	050300Z	32.6N 137.2E	LROR	-	22912																			35.4N 138.7E		
147	050300Z	32.6N 137.2E	P	1	2	700										946	263	18	12	CTWC						12
148	050300Z	32.6N 137.2E	LROR	-	22912																			35.4N 138.7E		
149	051037Z	34.6N 141.6E	SAT	(IN DATA									1	PCN 1	DMSP											
150	051121Z	34.6N 142.1E	SAT	(IN DATA									1	PCN 1	DMSP											
151	051121Z	34.6N 142.1E	SAT	(IN DATA									1	PCN 1	DMSP											
152	051200Z	34.6N 142.1E	LROR	-	22941																			35.4N 138.7E		
153	051200Z	34.6N 142.1E	P	1	2	700										953	268	20	16	CTWC						12
154	052212Z	35.4N 149.8E	SAT	(TS.0/5.0-25									1	PCN 3	DMSP											
155	052212Z	35.4N 149.8E	SAT	(TS.0/5.0-25									1	PCN 5	DMSP											
156	052212Z	35.4N 149.8E	SAT	(TS.0/5.0-25									1	PCN 5	DMSP											

TROPICAL STORM DOMIS
FIX POSITIONS FOR CYCLONE NO. 16
1800Z 03 OCT TO 0000Z 06 OCT

FIX NO.	TIME	POSIT	FIX CAT	ACQRY	LVL	DIR	VEL	WIND	HRS	RNG	MAX OBS SFC WIND VEL	MAX OBS WIND RNG	OBS SLP	MIN MGT	FLY LVL	EYE FORM	ORIENT	TATION	EYE DIA	POSIT OF MADAG	MSN NMHR
1	011239Z	9.0N 117.2E	SAT	(IN DATA)							PCN 5	DMSP									
2	022458Z	14.0N 110.8E	SAT	(T 0/1.0 / / HRS)							PCN 5	DMSP									
3	030057Z	14.0N 111.4E	SAT	(IN DATA)							PCN 5	DMSP									
4	030057Z	14.0N 111.9E	SAT	(T 1.0/1.0 / / HRS)							PCN 3	DMSP									
5	030436Z	14.0N 112.2E	SAT	(IN DATA)							PCN 5	DMSP									
6	031101Z	15.0N 112.8E	SAT	(IN DATA)							PCN 5	DMSP									
7	031339Z	14.0N 111.0E	SAT	(IN DATA)							PCN 5	DMSP									
8	031439Z	14.0N 112.2E	SAT	(IN DATA)							PCN 5	DMSP									
9	032446Z	15.0N 111.1E	SAT	(IN DATA)							PCN 6	DMSP									
10	032446Z	16.0N 111.6E	SAT	(T2.5/2.5 /W1.5/22HRS)							PCN 6	DMSP									
11	040039Z	16.0N 113.3E	SAT	(T2.0/2.0 /U2.0/25HRS)							PCN 3	DMSP									
12	040039Z	16.0N 111.4E	SAT	(IN DATA)							PCN 4	DMSP									
13	040417Z	16.0N 111.7E	SAT	(IN DATA)							PCN 3	DMSP									
14	041320Z	16.0N 112.0E	SAT	(IN DATA)							PCN 5	DMSP									
15	041320Z	16.0N 111.3E	SAT	(IN DATA)							PCN 6	DMSP									
16	042446Z	19.0N 112.7E	SAT	(IN DATA)							PCN 5	DMSP									
17	042446Z	19.0N 112.0E	SAT	(T2.0/3.0 /W0.5/24HRS)							PCN 4	DMSP									
18	050020Z	19.0N 112.8E	SAT	(T3.0/3.0 / / HRS)							PCN 5	DMSP									
19	050020Z	19.0N 112.6E	SAT	(T3.5/3.5 /U1.5/24HRS)							PCN 3	DMSP									
20	050458Z	19.0N 112.7E	SAT	(IN DATA)							PCN 5	DMSP									
21	050459Z	19.0N 112.7E	SAT	(IN DATA)							PCN 3	DMSP									
22	051000Z	20.0N 112.3E	LRDH	- 1091/																22.3N 114.2E	
23	051019Z	20.0N 112.6E	SAT	(IN DATA)							PCN 5	DMSP									
24	051400Z	20.0N 112.4E	LRDH	- 1191/																22.3N 114.2E	
25	051402Z	20.7N 112.6E	SAT	(IN DATA)							PCN 5	DMSP									
26	051402Z	20.9N 112.7E	SAT	(IN DATA)							PCN 5	DMSP									
27	051400Z	21.0N 112.4E	LRDH	- 1091/																22.3N 114.2E	
28	051500Z	21.2N 112.4E	LRDH	- 1191/																22.3N 114.2E	
29	051900Z	22.0N 112.6E	LRDH	- 1082/																22.3N 114.2E	
30	051940Z	23.4N 112.6E	SAT	(T4.0/4.0 /U2.0/24HRS)							PCN 4	DMSP									
31	052000Z	22.2N 112.7E	LRDH	- 1072/																22.3N 114.2E	
32	052100Z	22.4N 112.7E	LRDH	- 1055/																22.3N 114.2E	
33	052300Z	22.8N 112.8E	LRDH	- 2505/																22.3N 114.2E	
34	052422Z	22.5N 113.0E	SAT	(IN DATA)							PCN 5	DMSP									
35	060000Z	22.4N 112.9E	SAT	(T3.0/3.0 /S /20HRS)							PCN 3	DMSP									
36	060002Z	22.4N 113.0E	SAT	(T3.0/3.0 /W0.5/24HRS)							PCN 5	DMSP									
37	060439Z	23.4N 113.0E	SAT	(IN DATA)							PCN 3	DMSP									
38	061244Z	25.2N 115.1E	SAT	(IN DATA)							PCN 5	DMSP									

TYPHOON FLSTE
FIX POSITIONS FOR CYCLONE NO. 17
0000Z 04 OCT TO 0000Z 15 OCT

FIX NO.	TIME	POSIT	FIX CAT	ACQRY	LVL	DIR	VEL	WIND	HRS	RNG	MAX OBS SFC WIND VEL	MAX OBS WIND RNG	OBS SLP	MIN MGT	FLY LVL	EYE FORM	ORIENT	TATION	EYE DIA	POSIT OF MADAG	MSN NMHR
1	062344Z	7.0N 145.3E	SAT	(T 0/1.0 / / HRS)							PCN 5	DMSP									
2	072116Z	8.0N 142.8E	SAT	(IN DATA)							PCN 6	DMSP									
3	072426Z	10.0N 141.8E	SAT	(T1.0/1.0 /U1.0/24HRS)							PCN 5	DMSP									
4	072426Z	9.0N 143.8E	SAT	(T 0/1.0 / / HRS)							PCN 5	DMSP									
5	081001Z	10.0N 141.5E	SAT	(IN DATA)							PCN 5	DMSP									
6	081901Z	10.0N 141.4E	SAT	(IN DATA)							PCN 5	DMSP									
7	081907Z	10.0N 141.3E	SAT	(IN DATA)							PCN 5	DMSP									
8	081907Z	10.0N 141.3E	SAT	(IN DATA)							PCN 5	DMSP									
9	082104Z	12.0N 136.4E	SAT	(IN DATA)							PCN 5	DMSP									
10	082104Z	13.0N 139.0E	SAT	(T1.0/1.0 / / HRS)							PCN 6	DMSP									
11	082449Z	12.0N 138.3E	P	3 5 1500 170 35 100 210 35 150 140 1003											24 24						1
12	082407Z	12.0N 138.5E	SAT	(T1.0/1.0 /S /24HRS)							PCN 3	DMSP									
13	082407Z	12.0N 138.5E	SAT	(T1.0/1.0 /U1.0/24HRS)							PCN 5	DMSP									
14	090240Z	12.7N 136.9E	P	2 10 700 130 35 30 120 40 60 120 1001 309 11 8																	1
15	090244Z	13.0N 137.9E	SAT	(IN DATA)							PCN 5	DMSP									
16	090429Z	13.0N 135.4E	P	12 10 700 160 35 60 110 35 60 100 999 308 13 12																	2
17	090449Z	13.0N 136.9E	SAT	(IN DATA)							PCN 5	DMSP									
18	090449Z	13.0N 135.4E	SAT	(IN DATA)							PCN 5	DMSP									
19	091046Z	15.0N 135.5E	SAT	(IN DATA)							NOAA-4										
20	091149Z	14.2N 135.5E	SAT	(IN DATA)							PCN 5	DMSP									
21	091149Z	13.1N 135.8E	SAT	(IN DATA)							PCN 5	DMSP									
22	091440Z	14.0N 135.3E	P	10 5 700 320 40 240 75 - - - 999 308 13 9																	2
23	092158Z	16.0N 134.0E	P	3 5 700 140 60 60 5 70 60 5 991 301 14 11																	3
24	092233Z	16.0N 133.3E	SAT	(IN DATA)							PCN 5	DMSP									
25	092234Z	16.0N 133.3E	SAT	(T3.0/3.0 /U2.0/24HRS)							PCN 3	DMSP									
26	092249Z	16.0N 133.3E	SAT	(IN DATA)							PCN 3	DMSP									
27	092249Z	15.0N 133.3E	SAT	(T3.5/3.5 / / HRS)							PCN 3	DMSP									
28	092249Z	16.0N 133.4E	SAT	(T3.0/3.0 /U2.0/24HRS)							PCN 3	DMSP									
29	100040Z	16.0N 132.9E	SAT	(T2.5/2.5 / / HRS)							PCN 5	DMSP									
30	100045Z	16.0N 133.3E	SAT	(T3.0/3.0 /U2.0/25HRS)							NOAA-4										
31	100300Z	16.0N 132.6E	P	3 5 700 160 45 30 15 70 30 15 989 300 14 10																	3
32	100407Z	16.0N 132.5E	SAT	(IN DATA)							PCN 3	DMSP									
33	100407Z	16.0N 132.3E	SAT	(IN DATA)							PCN 3	DMSP									
34	100407Z	16.0N 131.5E	SAT	(T3.5/3.5 / / HRS)							PCN 5	DMSP									
35	100922Z	17.0N 131.0E	P	5 3 700 150 45 80 200 40 110 55 985 296 16 11																	4
36	101118Z	17.0N 130.6E	SAT	(IN DATA)							PCN 5	DMSP									
37	101119Z	17.0N 130.6E	SAT	(IN DATA)							PCN 5	DMSP									
38	101130Z	17.0N 130.5E	SAT	(IN DATA)							PCN 5	DMSP									
39	101131Z	17.0N 130.6E	SAT	(IN DATA)							PCN 5	DMSP									

FIX POSITIONS FOR CYCLONE NO. 17
0000Z 09 OCT TO 0000Z 15 OCT

[illegible]

TROPICAL DEPRESSION 18
FIX POSITIONS FOR CYCLONE NO. 18
0600Z 15 OCT TO 0600Z 17 OCT

FIX NO.	TIME	POSIT	FIX ACCHY CAT NA-MET	FIX LVL	FLT LVL	WIND DIR	WIND VEL	WIND RRG	MAX OBS SFC WIND VEL	MAX OBS WIND RRG	OBS MIN SLP	MIN 700MB MGT	FLT LVL TI/TO	EYE FORM	ORIEN- TATION	EYE DIA	POSIT OF MADAG	MSL NM/K
1	132417Z	11.0N 188.5E	SAT	01	0/1.0	/	/	MS	PCN 5	DMSP								
2	140252Z	11.0N 181.8E	SAT	01W DATA					PCN 6	DMSP								
3	141155Z	12.0N 181.8E	SAT	01W DATA					PCN 5	DMSP								
4	142155Z	13.0N 139.4E	SAT	01W DATA					PCN 5	DMSP								
5	142259Z	13.0N 139.5E	SAT	011.0/1.0 /01.0/24MS					PCN 5	DMSP								
6	142259Z	14.0N 180.9E	SAT	01	0/1.0	/	/	MS	PCN 5	DMSP								
7	150214Z	13.0N 139.6E	SAT	01W DATA					PCN 5	DMSP								
8	150417Z	13.0N 137.1E	P	3	2	1500	120	40 60	50	40 60	50	1004	-	25 23	-	-	-	1
9	150704Z	12.0N 135.8E	P	3	3	1500	80	25 300	100	20 270	35	1002	-	24 24	-	-	-	1
10	151018Z	13.0N 136.1E	SAT	01W DATA					PCN 5	DMSP								
11	151018Z	13.0N 136.5E	SAT	01W DATA					PCN 5	DMSP								
12	151018Z	13.0N 136.8E	SAT	01W DATA					PCN 5	DMSP								
13	151100Z	13.0N 137.0E	SAT	01W DATA					PCN 5	DMSP								
14	151100Z	13.0N 136.4E	SAT	01W DATA					PCN 5	DMSP								
15	151100Z	13.0N 137.0E	SAT	01W DATA					PCN 5	DMSP								
16	152121Z	14.0N 136.0E	SAT	01W DATA					PCN 5	DMSP								
17	152121Z	13.0N 133.7E	SAT	01W DATA					PCN 5	DMSP								
18	160022Z	14.0N 132.9E	SAT	011.0/1.0 /5 /25MS					PCN 5	DMSP								
19	160022Z	14.0N 132.3E	SAT	01	0/1.0	/5	/25MS		PCN 5	DMSP								
20	160156Z	13.0N 132.0E	SAT	01W DATA					PCN 5	DMSP								
21	160157Z	13.0N 131.8E	SAT	01W DATA					PCN 5	DMSP								
22	170003Z	14.0N 131.6E	SAT	012.0/2.0 /01.0/24MS					PCN 5	DMSP								
23	170137Z	14.0N 131.2E	SAT	01W DATA					PCN 5	DMSP								
24	170544Z	14.0N 130.2E	SAT	01W DATA					PCN 5	DMSP								
25	191005Z	14.0N 122.2E	SAT	01W DATA					NOAA-4									

TYPHOON FLOSSIE
FIX POSITIONS FOR CYCLONE NO. 19
0000Z 20 OCT TO 1200Z 23 OCT

FIX NO.	TIME	POSIT	FIX ACCHY CAT NA-MET	FIX LVL	FLT LVL	WIND DIR	WIND VEL	WIND RRG	MAX OBS SFC WIND VEL	MAX OBS WIND RRG	OBS MIN SLP	MIN 700MB MGT	FLT LVL TI/TO	EYE FORM	ORIEN- TATION	EYE DIA	POSIT OF MADAG	MSL NM/K
1	170138Z	14.0N 124.9E	SAT	01W DATA					PCN 5	DMSP								
2	171116Z	14.0N 126.0E	SAT	01W DATA					PCN 5	DMSP								
3	171136Z	15.0N 125.4E	SAT	01W DATA					PCN 6	DMSP								
4	171455Z	15.0N 125.3E	SAT	01W DATA					PCN 5	DMSP								
5	171455Z	15.0N 125.5E	SAT	01W DATA					PCN 6	DMSP								
6	172238Z	15.0N 122.7E	SAT	01W DATA					PCN 5	DMSP								
7	172239Z	14.0N 125.0E	SAT	01W DATA					PCN 5	DMSP								
8	172452Z	14.0N 125.5E	SAT	011.0/1.0 / / MS					PCN 5	DMSP								
9	172452Z	14.0N 125.3E	SAT	011.0/1.0 / / MS					PCN 5	DMSP								
10	172452Z	14.0N 125.2E	SAT	011.5/1.5 / / MS					PCN 5	DMSP								
11	180027Z	14.0N 122.0E	SAT	012.0/2.0 /00.5/25MS					NOAA-4									
12	180119Z	14.0N 124.9E	SAT	01W DATA					PCN 5	DMSP								
13	180119Z	15.0N 122.8E	SAT	01W DATA					PCN 5	DMSP								
14	180700Z	15.0N 122.5E	LRDR	-	10001												14.0N 120.0E	
15	180700Z	15.0N 122.6E	LRDR	-													14.0N 120.0E	
16	180700Z	15.0N 122.1E	LRDR	-	21720												14.0N 121.0E	
17	181124Z	16.0N 121.7E	SAT	01W DATA					PCN 5	DMSP								
18	181227Z	16.0N 121.5E	SAT	01W DATA					PCN 5	DMSP								
19	181404Z	16.0N 120.2E	SAT	01W DATA					NOAA-4									
20	182226Z	18.0N 119.8E	SAT	011.0/1.0 /5 /23MS					PCN 5	DMSP								
21	182227Z	18.0N 120.3E	SAT	01W DATA					PCN 6	DMSP								
22	190056Z	18.0N 120.8E	SAT	011.0/1.5 /00.5/25MS					PCN 5	DMSP								
23	190121Z	17.0N 121.0E	SAT	012.0/2.0 /5 /25MS					NOAA-4									
24	190422Z	18.0N 120.5E	SAT	011.0/1.0 / / MS					PCN 5	DMSP								
25	190422Z	18.0N 119.9E	SAT	01W DATA					PCN 5	DMSP								
26	191049Z	18.0N 118.9E	P	20	10	1500	90	40 360	60	40 360	60	994	-	26 23	-	-	-	1
27	191122Z	18.0N 120.4E	SAT	01W DATA					PCN 5	DMSP								
28	191122Z	17.0N 119.7E	SAT	01W DATA					PCN 6	DMSP								
29	191155Z	18.0N 122.2E	SAT	01W DATA					NOAA-4									
30	191158Z	18.0N 120.3E	SAT	01W DATA					PCN 5	DMSP								
31	191158Z	18.0N 121.3E	SAT	01W DATA					PCN 5	DMSP								
32	192214Z	18.0N 117.5E	SAT	01W DATA					PCN 5	DMSP								
33	192215Z	18.0N 117.3E	SAT	012.0/2.0 /01.0/24MS					PCN 5	DMSP								
34	200121Z	18.0N 117.3E	SAT	012.5/1.5 /00.5/23MS					NOAA-4									
35	200050Z	18.0N 116.1E	SAT	012.0/2.0 /01.0/20MS					PCN 5	DMSP								
36	200050Z	18.0N 116.5E	SAT	012.0/2.0 /01.0/24MS					PCN 5	DMSP								
37	200116Z	18.0N 116.0E	SAT	01W DATA					NOAA-4									
38	200233Z	18.0N 116.3E	SAT	01W DATA					PCN 5	DMSP								
39	200233Z	18.0N 116.1E	SAT	01W DATA					PCN 5	DMSP								
40	200577Z	18.0N 115.9E	P	15	10	1500	330	45 220	25	45 220	25	997	-	26 23	-	-	-	2
41	200700Z	18.0N 116.0E	P	15	10	700	-	-	-	-	-	995	305	12	-	-	-	2
42	201100Z	18.0N 115.9E	SAT	01W DATA					PCN 5	DMSP								
43	201100Z	18.0N 116.5E	SAT	01W DATA					PCN 5	DMSP								
44	201100Z	18.0N 115.8E	SAT	01W DATA					PCN 6	DMSP								
45	201255Z	18.0N 115.9E	SAT	01W DATA					NOAA-4									
46	201412Z	18.0N 116.2E	SAT	01W DATA					PCN 5	DMSP								
47	201412Z	18.0N 116.7E	SAT	01W DATA					PCN 6	DMSP								
48	201700Z	18.0N 115.9E	P	7	10	700	320	40 220	30	-	-	984	299	14 11	-	-	-	3
49	202155Z	18.0N 116.0E	P	7	10	700	50	50 320	65	-	-	984	300	14 11	-	-	-	3
50	202144Z	18.0N 115.4E	SAT	01W DATA					PCN 6	DMSP								

TYphoon FLOSSIE
FIX POSITIONS FOR CYCLONE NO. 19
0000Z 20 OCT TO 1200Z 23 OCT

FIX NO.	TIME	POSIT	FIX CAT	ACCHY	FIX LVL	FLY DIR	LVL WIND	SFC WIND	UWS MIN SLP	MIN 700MB MGT	FLY LVL TI/TO	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF MADAR	MSN NMHR
51	202452	15.7N 115.8E	SAT	(IR DATA				PCN 4 DMSP								
52	2100312	15.7N 115.7E	SAT	(T3.0/3.0 /01.0/24HRS)				PCN 5 DMSP								
53	2100322	15.7N 115.8E	SAT	(T3.0/3.0 /01.0/24HRS)				PCN 3 DMSP								
54	2100322	15.7N 115.9E	SAT	(T3.0/3.0 /01.0/24HRS)				PCN 3 DMSP								
55	2104042	16.8N 116.2E	SAT	(IR DATA				PCN 5 DMSP								
56	2104042	16.8N 116.5E	SAT	(IR DATA				PCN 5 DMSP								
57	2104052	16.8N 116.6E	SAT	(IR DATA				PCN 5 DMSP								
58	2104052	16.7N 116.5E	F	15 15 700	290	50	200	50 50 200	90	984	295	13	11	-	-	4
59	2110472	16.8N 116.6E	SAT	(IR DATA				PCN 5 DMSP								
60	2110472	16.8N 115.0E	SAT	(IR DATA				NOAA-4								
61	2111132	16.8N 116.8E	SAT	(IR DATA				PCN 3 DMSP								
62	2111132	16.7N 115.3E	SAT	(IR DATA				PCN 5 DMSP								
63	2114402	17.8N 116.6E	F	15 10 700	140	55	60	60 - -	-	983	294	14	12	-	-	4
64	2120452	18.8N 115.2E	F	5 5 700	120	75	100	55 - -	-	978	290	15	12	CTMC	-	5
65	2120452	18.8N 115.7E	SAT	(IR DATA				PCN 4 DMSP								
66	2120452	18.8N 116.2E	SAT	(IR DATA				PCN 6 DMSP								
67	2200132	18.8N 115.2E	SAT	(T4.0/4.0 /01.0/24HRS)				PCN 5 DMSP								
68	2200132	18.8N 115.2E	SAT	(T4.0/4.0 /01.0/24HRS)				PCN 3 DMSP								
69	2200132	18.8N 116.0E	SAT	(T4.0/4.0 /01.0/24HRS)				PCN 5 DMSP								
70	2201102	17.8N 115.5E	SAT	(T3.5/3.5 /01.0/24HRS)				NOAA-4								
71	2202302	18.8N 114.7E	F	5 2 700	120	70	50	70 60 60	90	976	287	17	11	CTMC	40	5
72	2204062	18.8N 114.7E	SAT	(IR DATA				PCN 5 DMSP								
73	2204062	18.8N 114.8E	SAT	(IR DATA				PCN 3 DMSP								
74	2204062	18.8N 114.5E	SAT	(IR DATA				PCN 5 DMSP								
75	2211172	18.8N 113.6E	SAT	(IR DATA				PCN 3 DMSP								
76	2211172	19.8N 113.9E	SAT	(IR DATA				PCN 3 DMSP								
77	2217542	19.8N 113.2E	SAT	(IR DATA				PCN 3 DMSP								
78	2217562	19.8N 113.1E	SAT	(IR DATA				NOAA-4								
79	2217002	20.8N 113.1E	LRHM	- 1078/												22.3N 114.2E
80	2224212	20.8N 112.0E	SAT	(IR DATA				PCN 4 DMSP								
81	2224212	20.8N 111.9E	SAT	(IR DATA				PCN 4 DMSP								
82	2301162	20.8N 111.5E	SAT	(T3.0/4.0 /00.5/23HRS)				NOAA-4								
83	2301362	20.8N 111.3E	SAT	(T3.0/4.0 /01.0/25HRS)				PCN 5 DMSP								
84	2301372	20.8N 112.2E	SAT	(T4.0/4.0 /01.0/25HRS)				PCN 4 DMSP								
85	2305092	21.8N 111.0E	SAT	(IR DATA				PCN 5 DMSP								
86	2305092	21.2N 110.3E	SAT	(IR DATA				PCN 5 DMSP								
87	2312052	21.9N 109.0E	SAT	(IR DATA				PCN 5 DMSP								
88	2312052	22.8N 109.0E	SAT	(IR DATA				PCN 6 DMSP								
89	2314512	22.8N 108.9E	SAT	(IR DATA				NOAA-4								
90	2314182	22.8N 108.6E	SAT	(IR DATA				PCN 5 DMSP								
91	2314182	22.8N 108.6E	SAT	(IR DATA				PCN 6 DMSP								

TROPICAL STORM GRACE
FIX POSITIONS FOR CYCLONE NO. 20
0000Z 25 OCT TO 0600Z 02 NOV

FIX NO.	TIME	POSIT	FIX CAT	ACCHY	FIX LVL	FLY DIR	LVL WIND	SFC WIND	UWS MIN SLP	MIN 700MB MGT	FLY LVL TI/TO	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF MADAR	MSN NMHR
1	2104142	21.8N 126.2E	SAT	(IR DATA				PCN 5 DMSP								
2	2110472	22.8N 127.1E	SAT	(IR DATA				PCN 5 DMSP								
3	2200132	24.8N 126.4E	SAT	(T 0/1.0 / / HRS)				PCN 3 DMSP								
4	2204062	24.8N 126.4E	SAT	(IR DATA				PCN 5 DMSP								
5	2210352	25.8N 126.4E	SAT	(IR DATA				PCN 5 DMSP								
6	2224552	24.8N 127.3E	SAT	(T 0/1.0 /5 /24HRS)				PCN 3 DMSP								
7	2324372	20.8N 129.7E	SAT	(T2.0/2.0 /02.0/24HRS)				PCN 5 DMSP								
8	2404092	20.8N 129.5E	SAT	(IR DATA				PCN 5 DMSP								
9	2410102	18.8N 130.0E	SAT	(IR DATA				PCN 5 DMSP								
10	2410112	17.8N 129.8E	SAT	(IR DATA				PCN 5 DMSP								
11	2417182	18.8N 129.1E	SAT	(IR DATA				PCN 5 DMSP								
12	2417182	18.8N 129.6E	SAT	(IR DATA				PCN 5 DMSP								
13	2421142	19.8N 133.5E	SAT	(IR DATA				PCN 5 DMSP								
14	2422562	18.8N 128.0E	SAT	(T2.0/2.0 / / HRS)				PCN 5 DMSP								
15	2422562	17.8N 128.0E	SAT	(T1.0/1.0 / / HRS)				PCN 6 DMSP								
16	2424182	18.8N 128.0E	SAT	(T2.0/2.0 /5 /24HRS)				PCN 3 DMSP								
17	2424182	18.8N 128.1E	SAT	(T1.0/1.0 / / HRS)				PCN 5 DMSP								
18	2502182	18.8N 128.3E	F	3 2 700	350	50	270	25 70 160	5	996	305	19	10	CTMC	18	1
19	2502502	17.8N 127.7E	SAT	(IR DATA				PCN 5 DMSP								
20	2502502	17.8N 128.0E	SAT	(IR DATA				PCN 5 DMSP								
21	2504322	17.8N 128.4E	SAT	(IR DATA				PCN 5 DMSP								
22	2504592	17.8N 128.9E	SAT	(IR DATA				PCN 5 DMSP								
23	2511412	17.8N 127.1E	SAT	(IR DATA				PCN 5 DMSP								
24	2511412	17.8N 127.0E	SAT	(IR DATA				PCN 5 DMSP								
25	2511502	17.8N 127.0E	SAT	(IR DATA				NOAA-4								
26	2511532	18.8N 128.8E	F	20 15 700	220	30	130	80 - -	-	999	308	17	10	-	-	2
27	2512002	18.8N 127.0E	SAT	(IR DATA				PCN 5 DMSP								
28	2512002	17.8N 127.1E	SAT	(IR DATA				PCN 5 DMSP								
29	2512442	18.8N 128.4E	F	15 15 700	230	24	110	100 - -	-	998	307	15	-	-	-	2
30	2522442	18.8N 128.5E	SAT	(IR DATA				PCN 3 DMSP								
31	2522442	18.8N 128.4E	SAT	(IR DATA				PCN 3 DMSP								
32	2600062	18.8N 128.4E	SAT	(T1.0/1.5 /00.5/23HRS)				NOAA-4								
33	2600412	18.8N 128.6E	SAT	(T2.0/2.0 /5 /26HRS)				PCN 5 DMSP								
34	2600412	18.8N 129.0E	SAT	(T 0/1.0 /01.0/25HRS)				PCN 5 DMSP								
35	2600422	18.8N 129.2E	SAT	(T1.0/2.0 /01.0/29HRS)				PCN 5 DMSP								
36	2600422	19.8N 128.9E	SAT	(IR DATA				PCN 5 DMSP								

TROPICAL STORM GRACE
FIX POSITIONS FOR CYCLONE NO. 20
0000Z 25 OCT TO 0600Z 02 NOV

FIX NO.	TIME	JOINT	FIX CAT	ACRY NA-MET	FIX LVL	FLI DIR	FLI VEL	MAX DIR	MAX VEL	MAX OBS SFC WIND	UWS SLP	MIN 700MB	FLY TLT/TO	EYE FORM	UNIDEN-TATION	EYE DIA	POSIT OF KADAM	MSN NMHM	
37	261129Z	18.4N 129.9E	SAT	(1M DATA						PCN 5 UMSP									
38	261129Z	18.4N 129.7E	SAT	(1M DATA						PCN 5 UMSP									
39	261129Z	18.6N 128.6E	SAT	(1M DATA						PCN 5 UMSP									
40	261129Z	18.4N 129.9E	SAT	(1M DATA						PCN 5 UMSP									
41	261230Z	18.4N 128.8E	P	3	15	700	90	20	360	50	-	-	1001	314	15	13	-	5	
42	270023Z	19.1N 130.0E	SAT	(11.0/1.0 /S /20HRS)						PCN 3 UMSP									
43	270046Z	19.1N 130.0E	SAT	(1M DATA						PCN 5 UMSP									
44	271116Z	18.4N 131.4E	SAT	(1M DATA						PCN 5 UMSP									
45	271204Z	18.4N 131.5E	SAT	(1M DATA						PCN 5 UMSP									
46	272204Z	18.4N 132.2E	SAT	(1M DATA						PCN 5 UMSP									
47	280001Z	18.4N 132.0E	SAT	(12.5/2.5 /01.5/12HRS)						NOAA-4									
48	280005Z	18.4N 132.2E	SAT	(12.0/2.0 /01.0/24HRS)						PCN 5 UMSP									
49	280005Z	18.4N 132.0E	SAT	(11.5/1.5 / / HRS)						PCN 5 UMSP									
50	280005Z	18.4N 132.0E	SAT	(12.0/2.0 / / HRS)						PCN 3 UMSP									
51	280352Z	18.4N 132.0E	SAT	(1M DATA						PCN 5 UMSP									
52	280356Z	18.4N 131.4E	SAT	(1M DATA						PCN 3 UMSP									
53	280352Z	18.2N 131.2E	P	5	5	700	220	35	140	55	35	140	50	-	309	13	10	6	
54	281104Z	18.2N 132.3E	SAT	(1M DATA						PCN 5 UMSP									
55	281105Z	18.1N 131.3E	SAT	(1M DATA						PCN 5 UMSP									
56	281105Z	17.4N 132.5E	SAT	(1M DATA						PCN 5 UMSP									
57	281452Z	18.1N 131.2E	SAT	(1M DATA						PCN 5 UMSP									
58	281572Z	18.1N 129.8E	P	2	20	700	230	30	120	80	-	-	-	310	10	10	-	7	
59	282136Z	17.1N 128.6E	P	5	10	700	90	30	10	30	25	20	35	-	309	12	11	7	
60	282208Z	17.4N 129.1E	SAT	(1M DATA						PCN 5 UMSP									
61	282208Z	18.4N 129.3E	SAT	(11.0/1.0 / / HRS)						PCN 5 UMSP									
62	282466Z	17.4N 128.4E	SAT	(11.0/2.0 /W1.0/24HRS)						PCN 5 UMSP									
63	282466Z	17.4N 129.7E	SAT	(12.0/2.0 /00.5/24HRS)						PCN 3 UMSP									
64	282466Z	18.4N 128.9E	SAT	(12.0/2.0 /S /24HRS)						PCN 5 UMSP									
65	290117Z	17.4N 128.3E	SAT	(1M DATA						PCN 5 UMSP									
66	290117Z	18.6N 129.0E	SAT	(1M DATA						PCN 5 UMSP									
67	290412Z	17.4N 128.6E	P	10	20	700	250	25	200	70	25	200	70	498	307	11	9	9	
68	291053Z	17.4N 129.3E	SAT	(1M DATA						PCN 5 UMSP									
69	291053Z	17.4N 128.7E	SAT	(1M DATA						PCN 5 UMSP									
70	291228Z	17.4N 129.4E	SAT	(1M DATA						PCN 5 UMSP									
71	291228Z	17.4N 128.8E	SAT	(1M DATA						PCN 5 UMSP									
72	291518Z	18.1N 128.6E	P	1	8	700	220	20	100	25	-	-	-	305	11	9	-	9	
73	292030Z	18.2N 128.5E	P	2	5	700	220	25	300	25	-	-	-	491	301	16	12	9	
74	292156Z	18.4N 129.0E	SAT	(1M DATA						PCN 5 UMSP									
75	292156Z	17.4N 130.6E	SAT	(11.0/1.0 /01.0/24HRS)						PCN 5 UMSP									
76	292328Z	18.4N 129.2E	SAT	(12.5/2.5 /01.5/24HRS)						PCN 5 UMSP									
77	292328Z	18.4N 130.2E	SAT	(11.5/2.0 /W0.5/24HRS)						PCN 5 UMSP									
78	292328Z	18.4N 129.3E	SAT	(13.0/3.0 /01.0/24HRS)						PCN 5 UMSP									
79	292355Z	19.4N 130.5E	SAT	(13.5/3.5 /01.0/23HRS)						NOAA-4									
80	300241Z	18.1N 128.7E	P	2	5	700	230	30	30	20	35	310	60	-	310	15	11	10	
81	300258Z	18.4N 129.5E	SAT	(1M DATA						PCN 5 UMSP									
82	300258Z	18.4N 130.8E	SAT	(1M DATA						PCN 5 UMSP									
83	300402Z	19.4N 129.4E	P	3	5	700	-	-	-	-	40	190	70	-	309	10	9	10	
84	301041Z	20.2N 130.6E	SAT	(1M DATA						PCN 6 UMSP									
85	301041Z	18.4N 129.5E	SAT	(1M DATA						PCN 5 UMSP									
86	301041Z	20.2N 130.3E	SAT	(1M DATA						PCN 5 UMSP									
87	301209Z	20.2N 130.1E	SAT	(1M DATA						PCN 5 UMSP									
88	301209Z	20.2N 129.6E	SAT	(1M DATA						PCN 5 UMSP									
89	301227Z	20.1N 129.6E	P	10	10	700	220	85	140	5	-	-	-	487	298	15	10	ETIP N-S 40A15	11
90	302140Z	21.5N 129.9E	P	4	3	700	260	60	190	15	484	295	17	14	CTHC	35	35	12	
91	302144Z	21.4N 129.9E	SAT	(1M DATA						PCN 3 UMSP									
92	302144Z	21.4N 129.9E	SAT	(1M DATA						PCN 3 UMSP									
93	302309Z	21.4N 130.0E	SAT	(12.0/2.0 /01.0/25HRS)						PCN 5 UMSP									
94	302310Z	21.4N 130.0E	SAT	(13.5/3.5 /01.0/24HRS)						PCN 3 UMSP									
95	302310Z	21.4N 129.9E	SAT	(13.0/3.0 /01.5/24HRS)						PCN 3 UMSP									
96	302310Z	21.4N 130.2E	SAT	(14.0/4.0 /01.0/24HRS)						PCN 3 UMSP									
97	310230Z	21.5N 130.1E	P	2	5	700	210	50	120	50	60	70	25	490	300	16	14	-	12
98	310240Z	21.4N 130.5E	SAT	(1M DATA						PCN 3 UMSP									
99	310259Z	23.4N 131.6E	P	10	2	700	60	35	300	22	-	-	-	494	303	16	10	-	13
100	311029Z	23.4N 131.9E	SAT	(1M DATA						PCN 5 UMSP									
101	311029Z	23.4N 132.1E	SAT	(1M DATA						PCN 5 UMSP									
102	311151Z	23.4N 131.7E	SAT	(1M DATA						PCN 5 UMSP									
103	311151Z	23.4N 131.5E	SAT	(1M DATA						PCN 5 UMSP									
104	311430Z	23.4N 131.8E	P	10	5	700	20	43	310	35	-	-	-	495	304	18	11	-	13
105	312132Z	24.2N 133.1E	SAT	(1M DATA						PCN 5 UMSP									
106	312132Z	24.2N 133.3E	SAT	(1M DATA						PCN 5 UMSP									
107	312132Z	23.4N 133.0E	SAT	(13.0/3.0 /01.0/26HRS)						PCN 5 UMSP									
108	312251Z	24.2N 133.0E	SAT	(13.0/3.5 /W0.5/24HRS)						PCN 5 UMSP									
109	312251Z	24.2N 133.5E	SAT	(12.5/3.0 /W0.5/24HRS)						PCN 5 UMSP									
110	312349Z	24.2N 133.0E	SAT	(12.5/3.0 /W1.0/23HRS)						NOAA-4									
111	010456Z	26.4N 136.4E	P	20	20	700	210	65	120	60	-	-	-	499	308	11	9	-	15
112	011016Z	26.4N 135.1E	SAT	(1M DATA						PCN 5 UMSP									
113	011016Z	25.4N 136.6E	SAT	(1M DATA						PCN 5 UMSP									
114	011016Z	26.4N 134.9E	SAT	(1M DATA						PCN 5 UMSP									
115	011132Z	25.4N 136.2E	SAT	(1M DATA						PCN 5 UMSP									
116	011132Z	26.4N 136.4E	SAT	(1M DATA						PCN 6 UMSP									
117	011458Z	26.4N 137.0E	P	5	5	700	200	70	120	20	-	-	-	491	301	13	9	CTHC 40	15
118	012120Z	27.4N 139.4E	SAT	(1M DATA						PCN 6 UMSP									
119	012233Z	27.4N 138.7E	SAT	(11.0/2.0 /W2.0/24HRS)						PCN 6 UMSP									
120	012233Z	27.4N 139.3E	SAT	(11.5/2.5 /W1.0/25HRS)						PCN 5 UMSP									
121	020422Z	27.4N 140.4E	SAT	(1M DATA						NOAA-4									
122	020426Z	26.4N 141.8E	P	1	10	700	210	25	290	80	55	290	100	498	307	8	-	-	16

TROPICAL STORM HELEN
FIX POSITIONS FOR CYCLONE NO. 21
0600Z 03 NOV TO 1200Z 04 NOV

FIX NO.	TIME	DMSIT	FIX CAT	ACCRV NAV-MET	FIX LVL	FLT DIR	LVL VEL	WIND HRG	WIND RRG	SFC WIND VEL	WIND HRG	WIND RRG	OBS SLP	MIN MGT	FLT TI/TO	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF HADAN	MSN NMHR
1	301209Z	15.7N 123.0E	SAT	(IR DATA																
2	310421Z	17.0N 125.0E	SAT	(T 0/1.0 / / HRS)																
3	010033Z	15.1N 125.2E	SAT	(T2.0/2.0 / / HRS)																
4	010033Z	15.1N 125.5E	SAT	(T2.0/2.0 /02.0/20HRS)																
5	012352Z	14.1N 121.8E	LHRM	- DEVELOPING CYC(ONTC																
6	012352Z	14.1N 121.8E	LHRM	- CENTER MOSTLY FILLED AND STATIONARY																
7	020000Z	14.1N 121.8E	LHRM	-																
8	020014Z	14.6N 120.7E	SAT	(T2.0/2.0+/S /24HRS)																
9	020047Z	14.1N 119.5E	SAT	(T1.0/1.0 /S /12HRS)																
10	021146Z	14.2N 118.3E	SAT	(IR DATA																
11	021256Z	14.2N 118.0E	SAT	(IR DATA																
12	022249Z	13.1N 116.3E	SAT	(T1.0/1.0 / / HRS)																
13	022250Z	13.9N 116.3E	SAT	(T2.0/2.0 /S /23HRS)																
14	022456Z	13.5N 116.8E	SAT	(T2.0/2.0 / / HRS)																
15	030141Z	13.7N 115.5E	SAT	(T2.0/2.0 /01.0/25HRS)																
16	030407Z	13.4N 114.5E	P	10 10 700 80 55 360																
17	031134Z	14.2N 113.7E	SAT	(IR DATA																
18	031224Z	14.1N 113.5E	SAT	(IR DATA																
19	031237Z	13.1N 112.8E	SAT	(IR DATA																
20	031237Z	14.1N 113.7E	SAT	(IR DATA																
21	032387Z	12.6N 111.2E	SAT	(T3.5/3.5-/01.5/24HRS)																
22	032387Z	12.7N 111.6E	SAT	(IR DATA																
23	040043Z	13.3N 111.2E	SAT	(T3.0/3.0-/01.0/23HRS)																
24	040119Z	13.2N 110.3E	SAT	(T3.0/3.0-/01.0/25HRS)																
25	040119Z	12.5N 110.3E	SAT	(T2.5/2.5-/01.5/26HRS)																
26	041122Z	13.1N 108.0E	SAT	(IR DATA																
27	041400Z	12.1N 107.9E	SAT	(IR DATA																
28	041400Z	13.1N 108.2E	SAT	(IR DATA																

TYPHOON TDA
FIX POSITIONS FOR CYCLONE NO. 22
0600Z 06 NOV TO 1200Z 11 NOV

FIX NO.	TIME	DMSIT	FIX CAT	ACCRV NAV-MET	FIX LVL	FLT DIR	LVL VEL	WIND HRG	WIND RRG	SFC WIND VEL	WIND HRG	WIND RRG	OBS SLP	MIN MGT	FLT TI/TO	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF HADAN	MSN NMHR
1	032156Z	9.2N 157.4E	SAT	(IR DATA																
2	040940Z	10.5N 155.0E	SAT	(IR DATA																
3	042043Z	10.4N 155.2E	SAT	(T 0/1.0 / / HRS)																
4	042138Z	10.0N 154.7E	SAT	(IR DATA																
5	050426Z	11.3N 152.4E	SAT	(IR DATA																
6	050428Z	13.0N 152.4E	SAT	(IR DATA																
7	051019Z	11.4N 152.3E	SAT	(IR DATA																
8	051022Z	10.0N 148.8E	SAT	(IR DATA																
9	052031Z	11.1N 151.7E	SAT	(IR DATA																
10	052243Z	12.0N 149.6E	SAT	(T1.0/1.0 /00.5/24HRS)																
11	052400Z	9.4N 152.0E	SAT	(T1.0/1.0 /01.0/26HRS)																
12	052401Z	11.5N 151.6E	SAT	(T 0/1.0 / / HRS)																
13	060416Z	12.4N 150.2E	SAT	(IR DATA																
14	060416Z	13.0N 150.6E	SAT	(IR DATA																
15	060416Z	11.0N 149.5E	SAT	(IR DATA																
16	060424Z	13.1N 148.8E	SAT	(IR DATA																
17	061142Z	12.4N 150.0E	SAT	(IR DATA																
18	061142Z	13.2N 150.6E	SAT	(IR DATA																
19	061400Z	13.4N 143.0E	P	20 5 1500 260 18 170																
20	062019Z	13.4N 149.8E	SAT	(IR DATA																
21	062030Z	12.4N 149.4E	P	15 5 1500 120 24 50																
22	062442Z	13.5N 149.3E	SAT	(T 0/2.0 / / HRS)																
23	062442Z	12.4N 150.2E	SAT	(T2.0/2.0 /02.0/24HRS)																
24	062438Z	11.1N 150.5E	SAT	(T2.0/2.0 /01.0/25HRS)																
25	070448Z	13.1N 149.8E	P	10 2 1500 320 35 220																
26	070430Z	13.1N 149.3E	P	5 5 700 120 35 70																
27	070404Z	14.1N 150.0E	SAT	(IR DATA																
28	070404Z	14.0N 150.2E	SAT	(IR DATA																
29	071045Z	15.0N 150.0E	SAT	(IR DATA																
30	071124Z	14.5N 150.1E	SAT	(IR DATA																
31	071124Z	14.6N 150.4E	SAT	(IR DATA																
32	071444Z	14.0N 149.3E	P	15 700 190 25 100																
33	071800Z	14.1N 148.9E	P	20 700 120 40 50																
34	072007Z	15.5N 148.6E	SAT	(IR DATA																
35	072037Z	14.1N 148.7E	P	2 5 700 350 30 250																
36	072149Z	15.5N 148.1E	SAT	(IR DATA																
37	072244Z	15.1N 149.1E	SAT	(T3.0/3.0 /01.0/24HRS)																
38	072238Z	15.4N 149.7E	SAT	(T2.0/2.0 /S /23HRS)																
39	080444Z	15.1N 148.6E	P	2 15 700 180 50 100																
40	080451Z	16.2N 148.2E	SAT	(IR DATA																
41	080414Z	17.1N 148.2E	P	10 5 700 260 30 180																
42	081105Z	16.4N 148.1E	SAT	(IR DATA																
43	081105Z	17.2N 149.0E	SAT	(IR DATA																
44	081115Z	17.1N 148.9E	SAT	(IR DATA																
45	081436Z	17.1N 147.2E	P	10 5 700 60 50 320																
46	082115Z	18.1N 146.5E	P	5 700 310 36 210																
47	082137Z	18.0N 145.9E	SAT	(IR DATA																
48	082137Z	18.4N 147.1E	SAT	(IR DATA																
49	082205Z	18.1N 145.8E	SAT	(T3.5/3.5 /00.5/24HRS)																
50	082331Z	18.1N 146.1E	SAT	(T4.0/4.0 /02.0/25HRS)																

TYPHOON TUA
FIX POSITIONS FOR CYCLONE NO. 22
0600Z 06 NOV TO 1200Z 11 NOV

FIX NO.		TIME	POSIT	FIX CAT	ACCHY	LVL	DIR	VEL	BKG	RNG	MAX OBS SFC WIND VEL	MAX OBS HGT WIND VEL	UMS SLP	MIN TUDMB	FLY LVL	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF HADAM	MSN NMHR	
51	090230Z	18.6N	146.0E	P	-	5	700	10	65	330	7000A-4										
52	091016Z	18.8N	145.5E	SAT	(IM DATA						NOM	UMSP									
53	091021Z	18.7N	145.4E	SAT	(IM DATA						PCN 5	UMSP									
54	091022Z	18.9N	145.6E	SAT	(IM DATA						PCN 5	UMSP									
55	091047Z	18.5N	145.1E	SAT	(IM DATA						PCN 6	UMSP									
56	091047Z	18.6N	145.5E	SAT	(IM DATA						PCN 6	UMSP									
57	091430Z	20.2N	145.4E	P	10	5	700	240	80	210	60	-	-	970	293	16	12	CTMC	60	8	
58	092125Z	21.1N	145.5E	SAT	(T5.0/5.0 /U1.5/24HRS)						PCN 4	UMSP									
59	092125Z	21.5N	144.9E	SAT	(T4.0/4.0 / / HRS)						PCN 5	UMSP									
60	092147Z	21.6N	145.4E	SAT	(IM DATA						PCN 3	UMSP									
61	092230Z	21.5N	146.0E	SAT	(T5.0/5.0 /U1.0/23HRS)						N0AA-4										
62	092329Z	22.2N	145.7E	SAT	(IM DATA						PCN 1	UMSP									
63	092329Z	22.2N	145.8E	SAT	(T4.5/4.5 / / HRS)						PCN 3	UMSP									
64	100245Z	22.9N	146.0E	P	2	3	700	290	70	210	70	100	210	50	962	276	17	12	CTMC	30	9
65	101010Z	25.1N	147.9E	SAT	(IM DATA						PCN 1	UMSP									
66	101113Z	26.1N	147.2E	SAT	(IM DATA						N0AA-4										
67	101210Z	26.3N	148.3E	SAT	(IM DATA						PCN 1	UMSP									
68	101210Z	26.3N	147.8E	SAT	(IM DATA						PCN 1	UMSP									
69	101437Z	27.6N	147.6E	P	5	2	700	240	110	180	20	-	-	959	273	20	16	CTMC	25	10	
70	102113Z	31.7N	150.5E	SAT	(IM DATA						PCN 3	UMSP									
71	102113Z	31.7N	150.9E	SAT	(T3.0/3.0 / / HRS)						PCN 5	UMSP									
72	102129Z	31.7N	150.2E	SAT	(T3.5/4.5 /U1.5/24HRS)						PCN 4	UMSP									
73	102314Z	33.0N	151.9E	SAT	(T4.0/5.0 /U1.0/23HRS)						N0AA-4										
74	110457Z	37.5N	153.2E	SAT	(IM DATA						PCN 5	UMSP									
75	110457Z	37.5N	153.7E	SAT	(IM DATA						PCN 5	UMSP									
76	111019Z	42.0N	157.0E	SAT	(IM DATA						N0AA-4										
77	111419Z	37.2N	153.6E	SAT	(IM DATA						PCN 5	UMSP									

TYPHOON JUNE
FIX POSITIONS FOR CYCLONE NO. 23
0600Z 16 NOV TO 0000Z 24 NOV

FIX NO.	TIME	POSIT	FIX CAT	ACCHY NA-MET	FIX LVL	FLT DIR	LVL	WIND VEL	WIND DIR	WIND RNG	MAX OBS SFC WIND VEL	MAX OBS WIND DIR	OBS SLP	MIN TUDMB	FLY LVL	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF HADAM	MSN NMHR	
1	152215Z	7.7N 149.2E	SAT	(T 0/1.0 / / HRS)							PCN 5	UMSP									
2	160421Z	8.5N 146.5E	SAT	(IM DATA)							PCN 5	UMSP									
3	162025Z	8.5N 147.1E	SAT	(IM DATA)							PCN 6	UMSP									
4	162157Z	8.5N 147.2E	SAT	(T2.0/2.0 /U2.0/24HRS)							PCN 6	UMSP									
5	162319Z	8.4N 145.8E	SAT	(T1.0/1.0 /U0.5/24HRS)							N0AA-4	(CONF 01)									
6	162438Z	9.2N 146.2E	SAT	(IM DATA)							PCN 5	UMSP									
7	150439Z	7.7N 145.9E	SAT	(IM DATA)							PCN 5	UMSP									
8	151038Z	8.4N 145.8E	SAT	(IM DATA)							PCN 5	UMSP									
9	151152Z	9.4N 144.5E	SAT	(IM DATA)							N0AA-4	(CONF 03)									
10	152155Z	8.4N 143.3E	SAT	(IM DATA)							PCN 5	UMSP									
11	152155Z	8.2N 143.4E	SAT	(T 0/1.0 / / HRS)							PCN 5	UMSP									
12	152207Z	7.7N 142.9E	SAT	(T2.0/2.0 /S /25HRS)							PCN 5	UMSP									
13	152207Z	7.7N 142.8E	SAT	(IM DATA)							PCN 5	UMSP									
14	160015Z	7.7N 144.0E	SAT	(T2.0/2.0 /U1.0/26HRS)							N0AA-4	(CONF 02)									
15	160306Z	6.4N 143.4E	P	5	2	1500	350	27	240	25	30	210	35	996	-	23	23	-	-	2	
16	160435Z	6.4N 142.8E	P	5	5	700	70	30	360	10	-	-	994	303	14	14	CTMC	-	5	3	
17	161052Z	6.4N 142.6E	SAT	(IM DATA)							N0AA-4	(CONF 01)									
18	161201Z	7.2N 141.5E	SAT	(IM DATA)							PCN 5	UMSP									
19	161401Z	6.4N 142.5E	SAT	(IM DATA)							PCN 5	UMSP									
20	161435Z	6.4N 142.8E	P	5	5	700	80	42	320	10	-	-	992	301	12	10	CTMC	-	5	3	
21	162053Z	6.4N 142.8E	P	10	5	700	150	40	50	10	35	50	10	986	297	16	12	CTMC	-	4	
22	162142Z	6.4N 142.6E	SAT	(IM DATA)							PCN 5	UMSP									
23	162142Z	6.4N 143.4E	SAT	(T2.0/2.0 /U2.0/24HRS)							PCN 6	UMSP									
24	162402Z	6.4N 142.5E	SAT	(T3.5/3.5 /U1.5/24HRS)							PCN 5	UMSP									
25	162402Z	6.4N 142.3E	SAT	(T3.0/3.0 / / HRS)							PCN 3	UMSP									
26	162452Z	6.4N 142.8E	SAT	(T3.0/3.0 /U1.0/23HRS)							N0AA-4	(CONF 01)									
27	170418Z	6.4N 142.4E	P	5	5	700	310	45	240	40	50	180	65	981	293	16	11	CTMC	-	4	
28	170433Z	6.4N 142.5E	P	5	2	700	240	64	130	22	55	320	25	977	288	16	13	FLTP	E-W	22A14	5
29	171027Z	6.4N 142.7E	SAT	(IM DATA)							PCN 5	UMSP									
30	171027Z	7.0N 142.1E	SAT	(IM DATA)							PCN 3	UMSP									
31	171143Z	6.4N 142.4E	SAT	(IM DATA)							PCN 3	UMSP									
32	171143Z	6.4N 142.3E	SAT	(IM DATA)							PCN 6	UMSP									
33	171147Z	6.4N 141.5E	SAT	(IM DATA)							N0AA-4	(CONF 02)									
34	171147Z	7.0N 142.4E	P	5	5	700	10	50	290	25	-	-	973	286	14	12	FLTP	E-W	18A12	5	
35	172110Z	7.0N 142.3E	P	5	5	700	340	75	240	10	70	240	10	968	281	14	14	CTMC	10	6	
36	172130Z	7.0N 142.3E	SAT	(IM DATA)							PCN 4	UMSP									
37	172130Z	7.0N 141.9E	SAT	(T4.5/4.5 /U1.5/23HRS)							PCN 4	UMSP									
38	172432Z	7.0N 142.4E	SAT	(T5.0/5.0 /U1.5/24HRS)							PCN 3	UMSP									
39	172432Z	7.0N 142.4E	SAT	(IM DATA)							PCN 3	UMSP									
40	180009Z	7.0N 142.5E	SAT	(T4.0/4.0 /U1.0/25HRS)							N0AA-4	(CONF 01)									
41	180430Z	8.2N 142.6E	P	5	5	700	50	65	10	10	80	240	5	964	282	20	14	CTMC	10	6	
42	180430Z	4.2N 142.3E	P	5	2	700	80	75	350	15	-	-	965	278	14	17	CTMC	-	18	7	
43	181015Z	9.4N 142.2E	SAT	(IM DATA)							PCN 3	UMSP									
44	181015Z	9.4N 141.9E	SAT	(IM DATA)							PCN 6	UMSP									
45	181048Z	10.4N 141.2E	SAT	(IM DATA)							N0AA-4	(CONF 01)									
46	181125Z	9.4N 142.3E	SAT	(IM DATA)							PCN 3	UMSP									
47	181125Z	9.4N 142.2E	SAT	(IM DATA)							PCN 3	UMSP									
48	181449Z	9.4N 142.4E	P	5	2	700	80	80	350	30	-	-	955	264	20	13	CTMC	-	6	7	
49	181450Z	10.4N 142.3E	P	5	2	700	320	80	270	10	-	-	947	263	21	12	CTMC	-	7	8	
50	181750Z	10.4N 142.1E	P	3	2	700	120	95	40	15	-	-	942	258	21	13	-	-	-	4	

TYphoon JUNE
FIX POSITIONS FOR CYCLONE NO. 23
0000Z 16 NOV TO 0000Z 24 NOV

FIX NO.	TIME	POSN	FIX CAT	AGENCY	FIX LAT	FIX LONG	FLY LVL	DIR	VEL	BRG	RNG	MAX OBS SFC WIND VEL	MAX OBS WIND DIR	OBS MIN SLP	MIN TGT	FLY TGT	EYE FORM	ORIENTATION	EYE DIA	POSIT OF MAUAK	MSN NMHR
51	182050Z	10.4N 141.9E	P	10	2	700	110	95	20	15	100	50	7	919	239	21	13	CTMC	12		9
52	182118Z	11.0N 142.0E	SAT																		
53	182118Z	11.0N 142.0E	SAT																		
54	182224Z	11.0N 141.7E	SAT																		
55	182224Z	11.0N 141.6E	SAT																		
56	182304Z	10.4N 141.5E	SAT																		
57	190402Z	11.7N 141.7E	P	-	2	700	200	115	120	4	150	20	2	888	212	25	13	CONC	-	26	10
58	190705Z	12.2N 141.6E	LRUR																		
59	190752Z	12.5N 141.5E	LRUR																		
60	190832Z	12.4N 141.3E	P	5	1	700	270	110	160	10	-	-	-	875	200	26	14	CTMC	5		11
61	190852Z	12.4N 141.3E	LRUR																		
62	190852Z	13.1N 141.2E	LRUR																		
63	191003Z	13.0N 141.2E	SAT																		
64	191003Z	12.8N 141.0E	SAT																		
65	191100Z	13.1N 141.1E	LRUR																		
66	191106Z	13.1N 141.1E	SAT																		
67	191106Z	13.1N 141.1E	SAT																		
68	191132Z	13.2N 141.0E	SAT																		
69	191400Z	13.5N 140.5E	P	5	1	700	-	-	-	-	-	-	-	875	200	28	19	CTMC	5		12
70	192106Z	14.2N 139.7E	SAT																		
71	192106Z	14.1N 139.6E	SAT																		
72	192153Z	14.3N 140.0E	P	15	2	700	-	-	-	-	120	90	10	895	218	22	18	CONC	-	4	13
73	192148Z	14.2N 139.6E	SAT																		
74	192148Z	14.3N 139.7E	SAT																		
75	192148Z	14.3N 139.7E	SAT																		
76	192148Z	14.3N 139.9E	SAT																		
77	200001Z	14.1N 139.6E	SAT																		
78	200244Z	14.4N 138.9E	P	3	1	700	80	90	10	10	90	20	10	896	218	20	16	CONC	-	8	14
79	200450Z	15.2N 138.6E	SAT																		
80	200500Z	15.0N 137.9E	SAT																		
81	201045Z	15.3N 137.9E	SAT																		
82	201229Z	15.4N 138.2E	SAT																		
83	201229Z	15.2N 138.0E	SAT																		
84	201229Z	15.4N 138.1E	SAT																		
85	201430Z	15.6N 137.9E	P	5	2	700	310	95	210	40	-	-	-	899	220	21	19	CTMC	12		15
86	202054Z	16.3N 136.7E	SAT																		
87	202054Z	16.2N 137.2E	SAT																		
88	202054Z	16.1N 137.3E	SAT																		
89	202362Z	16.5N 136.8E	SAT																		
90	202301Z	16.7N 137.1E	SAT																		
91	202330Z	16.9N 136.9E	SAT																		
92	202330Z	16.5N 136.7E	SAT																		
93	210316Z	17.4N 136.4E	P	5	1	700	290	100	190	5	130	20	14	899	-	22	13	CTMC	29		16
94	210436Z	18.1N 135.4E	SAT																		
95	210436Z	18.0N 135.6E	SAT																		
96	211146Z	18.4N 136.1E	SAT																		
97	211211Z	18.4N 135.4E	SAT																		
98	211211Z	18.4N 135.3E	SAT																		
99	211211Z	18.4N 135.4E	SAT																		
100	211442Z	18.4N 135.2E	P	3	2	700	310	100	230	15	-	-	-	920	239	17	13	ETIP	N-S	40X25	17
101	212224Z	20.2N 135.2E	SAT																		
102	212224Z	20.2N 135.3E	SAT																		
103	212311Z	20.4N 135.1E	SAT																		
104	212311Z	20.3N 135.2E	SAT																		
105	212311Z	20.4N 135.1E	SAT																		
106	212352Z	19.9N 135.0E	SAT																		
107	220250Z	21.1N 135.0E	P	5	3	700	200	105	120	50	90	120	40	925	243	19	16	CTMC	20		18
108	221042Z	23.0N 135.0E	SAT																		
109	221108Z	22.5N 135.6E	SAT																		
110	221108Z	22.5N 135.7E	SAT																		
111	221153Z	22.7N 135.2E	SAT																		
112	221153Z	22.7N 135.3E	SAT																		
113	221430Z	23.1N 135.3E	P	5	2	700	340	115	250	90	-	-	-	937	254	17	13	ETIP	SW-NE	30X20	19
114	222212Z	25.0N 137.0E	SAT																		
115	222212Z	24.9N 137.4E	SAT																		
116	222253Z	25.1N 137.2E	SAT																		
117	222254Z	24.6N 138.0E	SAT																		
118	222258Z	25.0N 137.3E	SAT																		
119	230240Z	26.2N 138.4E	P	5	5	700	250	100	160	85	94	160	100	943	259	16	14	CTMC	10		20
120	231056Z	28.5N 142.9E	SAT																		
121	231056Z	29.5N 142.1E	SAT																		
122	231134Z	29.3N 142.6E	SAT																		
123	231134Z	29.9N 142.7E	SAT																		
124	231134Z	29.5N 142.2E	SAT																		
125	232017Z	35.6N 150.8E	SAT																		
126	232018Z	34.9N 150.2E	SAT																		
127	232344Z	36.4N 152.1E	SAT																		
128	232357Z	35.6N 151.7E	SAT																		
129	232357Z	36.1N 151.9E	SAT																		
130	232442Z	34.0N 155.0E	SAT																		

TROPICAL DEPRESSION 24
FIX POSITIONS FOR CYCLONE NO. 24
0000Z 27 DEC TO 0000Z 28 DEC

FIX NO.	TIME	COORD	FIX ACQRY CAT	ACQRY MET	FIX LVL	FLT DIR	LVL VEL	WIND HRS	WIND RRG	MAX OBS SFC WIND VEL	WIND RRG	OBS MIN SLP	MIN T00MH MGT	FLT LVL TI/TO	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF KAUAN	MSK NMHR
1	232103Z	8.1N 136.6E	SAT			(1.0/1.0 / / HRS)				PCN 5	UMSP								
2	240048Z	7.8N 133.1E	SAT			(1.0/1.0 / / HRS)				PCN 5	UMSP								
3	242232Z	7.9N 130.9E	SAT			(1.0/1.0 / / HRS)				PCN 5	UMSP								
4	251117Z	7.7N 124.1E	SAT			(1.0/1.0 / / HRS)				PCN 5	UMSP								
5	252202Z	9.2N 127.7E	SAT			(12.0/2.0 / / HRS)				PCN 5	UMSP								
6	260030Z	10.8N 127.2E	SAT			(12.0/2.0 / / HRS)				NOAA-4		(CONF 01)							
7	261105Z	13.5N 125.2E	SAT			(1.0/1.0 / / HRS)				PCN 5	UMSP								
8	261304Z	11.4N 124.4E	SAT			(1.0/1.0 / / HRS)				NOAA-4		(CONF 02)							
9	261319Z	12.5N 125.6E	SAT			(1.0/1.0 / / HRS)				PCN 6	UMSP								
10	262208Z	13.9N 124.6E	SAT			(11.0/2.0 / / HRS)				PCN 5	UMSP								
11	262208Z	14.1N 125.5E	SAT			(12.5/2.5 / / HRS)				PCN 6	UMSP								
12	270018Z	14.3N 123.0E	SAT			(12.0/2.0 / / HRS)				PCN 6	UMSP								
13	270123Z	15.4N 124.5E	SAT			(12.5/2.5 / / HRS)				NOAA-4		(CONF 02)							
14	271053Z	14.6N 122.0E	SAT			(1.0/1.0 / / HRS)				PCN 5	UMSP								
15	271053Z	15.1N 121.7E	SAT			(1.0/1.0 / / HRS)				PCN 5	UMSP								
16	271206Z	15.3N 122.0E	SAT			(1.0/1.0 / / HRS)				NOAA-4		(CONF 02)							
17	271300Z	15.2N 122.7E	SAT			(1.0/1.0 / / HRS)				PCN 6	UMSP								
18	272156Z	13.9N 121.4E	SAT			(1.0/1.0 / / HRS)				PCN 5	UMSP								
19	272156Z	13.8N 121.7E	SAT			(1.0/1.0 / / HRS)				PCN 5	UMSP								
20	272338Z	14.0N 121.8E	SAT			(1.0/1.0 / / HRS)				PCN 5	UMSP								
21	272338Z	15.4N 121.7E	SAT			(11.0/2.0 / / HRS)				PCN 5	UMSP								
22	280024Z	15.1N 122.5E	SAT			(12.0/2.5 / / HRS)				NOAA-4		(CONF 01)							
23	281401Z	17.5N 123.5E	SAT			(1.0/1.0 / / HRS)				NOAA-4									
24	290118Z	15.4N 126.5E	SAT			(1.0/1.0 / / HRS)				NOAA-4									

TROPICAL DEPRESSION 25
FIX POSITIONS FOR CYCLONE NO. 25
0000Z 27 DEC TO 0000Z 28 DEC

FIX NO.	TIME	COORD	FIX ACQRY CAT	ACQRY MET	FIX LVL	FLT DIR	LVL VEL	WIND HRS	WIND RRG	MAX OBS SFC WIND VEL	WIND RRG	OBS MIN SLP	MIN T00MH MGT	FLT LVL TI/TO	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF KAUAN	MSK NMHR
1	250131Z	7.2N 113.2E	SAT			(11.5/1.5 / / HRS)				NOAA-4		(CONF 01)							
2	251117Z	11.0N 111.7E	SAT			(1.0/1.0 / / HRS)				PCN 5	UMSP								
3	251210Z	10.5N 114.0E	SAT			(1.0/1.0 / / HRS)				NOAA-4		(CONF 02)							
4	260002Z	11.3N 113.3E	SAT			(11.0/1.0 / / HRS)				PCN 5	UMSP								
5	260224Z	10.5N 113.0E	SAT			(11.5/1.5 / / HRS)				NOAA-4		(CONF 02)							
6	261305Z	11.2N 113.5E	SAT			(1.0/1.0 / / HRS)				NOAA-4		(CONF 02)							
7	262450Z	11.2N 114.3E	SAT			(13.0/3.0 / / HRS)				PCN 4	UMSP								
8	270018Z	10.0N 112.6E	SAT			(11.5/1.5 / / HRS)				PCN 3	UMSP								
9	270125Z	10.3N 113.4E	SAT			(13.0/3.0 / / HRS)				NOAA-4		(CONF 01)							
10	271052Z	11.2N 114.0E	SAT			(1.0/1.0 / / HRS)				NOAA-4		(CONF 02)							
11	271235Z	10.7N 113.1E	SAT			(1.0/1.0 / / HRS)				PCN 5	UMSP								
12	271300Z	10.5N 112.5E	SAT			(1.0/1.0 / / HRS)				PCN 3	UMSP								
13	272338Z	9.8N 115.8E	SAT			(12.0/2.0 / / HRS)				PCN 5	UMSP								
14	272338Z	9.6N 116.0E	SAT			(12.0/3.0 / / HRS)				PCN 5	UMSP								
15	280025Z	10.0N 116.0E	SAT			(13.0/3.0 / / HRS)				NOAA-4		(CONF 02)							
16	280056Z	9.4N 115.1E	SAT			(12.0/2.0 / / HRS)				PCN 4	UMSP								
17	281141Z	9.1N 115.1E	SAT			(1.0/1.0 / / HRS)				PCN 5	UMSP								
18	281233Z	9.4N 115.8E	SAT			(1.0/1.0 / / HRS)				PCN 5	UMSP								
19	281233Z	9.0N 114.6E	SAT			(1.0/1.0 / / HRS)				PCN 6	UMSP								
20	281249Z	9.0N 116.0E	SAT			(1.0/1.0 / / HRS)				NOAA-4		(CONF 02)							
21	282326Z	9.0N 116.7E	SAT			(12.0/2.0 / / HRS)				PCN 5	UMSP								
22	282326Z	8.3N 116.9E	SAT			(11.0/2.0 / / HRS)				PCN 6	UMSP								
23	290121Z	8.3N 117.0E	SAT			(12.5/3.0 / / HRS)				NOAA-4		(CONF 01)							
24	290123Z	8.6N 117.7E	SAT			(1.0/1.0 / / HRS)				PCN 6	UMSP								
25	290418Z	8.5N 117.4E	SAT			(13.0/3.0 / / HRS)				PCN 6	UMSP								
26	291200Z	10.4N 115.5E	SAT			(1.0/1.0 / / HRS)				NOAA-4		(CONF 02)							
27	291211Z	8.5N 117.5E	SAT			(1.0/1.0 / / HRS)				PCN 5	UMSP								
28	291211Z	10.4N 117.6E	SAT			(1.0/1.0 / / HRS)				PCN 5	UMSP								
29	292142Z	9.8N 118.8E	SAT			(12.0/2.0 / / HRS)				PCN 5	UMSP								
30	300021Z	8.0N 119.3E	SAT			(11.5/2.5 / / HRS)				NOAA-4		(CONF 02)							
31	301242Z	9.4N 117.5E	SAT			(1.0/1.0 / / HRS)				NON	UMSP								

0800Z 10 JAN 10 0800Z 11 JAN

FIX POSITIONS FOR TROPICAL CYCLONE NO. 24-75

0600Z 02 MAY TO 0000Z 12 MAY

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FIX POSITIONS FOR TROPICAL CYCLONE NO. 25-75
2000Z 05 MAY TO 0600Z 06 MAY

FIX NO.	TIME	POSIT	FIX CAT	ACCHY NAV-MET	FIX LVL	FLT DIR	MAX OBS VEL	MAX OBS WIND HRG	SFC WIND HRG	UBS SLP	MIN MGT	FLT TI/TO	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF RADAR	MSN NMHR
1	050128Z	12.7N 95.4E	SAT				(12.5/2.5 / / HRS)		PCN 5 UMSP								
2	050548Z	13.3N 96.1E	SAT				(11.5/1.5 / / HRS)		PCN 3 UMSP								
3	050948Z	13.3N 96.0E	SAT				(13.0/3.0 / / HRS)		PCN 5 UMSP								
4	051409Z	14.3N 95.2E	SAT				(1R DATA		NOAA-4								(CONF 02)
5	051409Z	14.3N 94.6E	SAT				(1R DATA		PCN 3 UMSP								
6	051409Z	14.3N 94.5E	SAT						PCN 5 UMSP								
7	060227Z	15.2N 94.0E	SAT				(14.0/4.0 /02.0/24HRS)		NOAA-4								(CONF 01)
8	060251Z	15.3N 94.1E	SAT				(13.0/3.0 /01.5/24HRS)		PCN 3 UMSP								
9	060251Z	15.4N 94.5E	SAT				(1R DATA		PCN 3 UMSP								
10	060252Z	15.1N 94.0E	SAT				(1R DATA		PCN 3 UMSP								
11	060252Z	14.8N 94.3E	SAT				(14.0/4.0 / / HRS)		PCN 1 UMSP								
12	061451Z	15.8N 93.2E	SAT				(1R DATA		PCN 1 UMSP								
13	061452Z	15.2N 92.9E	SAT				(1R DATA		NOAA-4								(CONF 01)
14	061452Z	15.6N 93.0E	SAT				(1R DATA		PCN 2 UMSP								
15	070222Z	16.2N 93.9E	SAT				(15.5/5.5 /01.5/25HRS)		NOAA-4								(CONF 02)
16	070310Z	16.6N 93.5E	SAT				(14.5/4.5 / / HRS)		PCN 1 UMSP								
17	070310Z	16.5N 93.6E	SAT				(15.0/5.0 /02.0/24HRS)		PCN 1 UMSP								
18	071406Z	17.3N 95.0E	SAT				(1R DATA		NOAA-4								(CONF 01)
19	071451Z	17.1N 94.2E	SAT				(1R DATA		PCN 5 UMSP								
20	080214Z	18.2N 96.5E	SAT				(1R DATA		PCN 3 UMSP								
21	080452Z	18.8N 96.9E	SAT				(13.0/4.0 /01.5/24HRS)		PCN 3 UMSP								
22	080452Z	18.2N 96.7E	SAT				(13.0/4.0 /01.0/24HRS)		PCN 3 UMSP								

FIX POSITIONS FOR TROPICAL CYCLONE NO. 28-75
2000Z 20 OCT TO 0600Z 22 OCT

FIX NO.	TIME	POSIT	FIX CAT	ACCHY NAV-MET	FIX LVL	FLT DIR	MAX OBS VEL	MAX OBS WIND HRG	SFC WIND HRG	UBS SLP	MIN MGT	FLT TI/TO	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF RADAR	MSN NMHR
1	190416Z	16.2N 72.0E	SAT				(11.5/1.5 /00.5/24HRS)		NOAA-4								(CONF 02)
2	191455Z	17.9N 72.0E	SAT				(1R DATA		NOAA-4								(CONF 02)
3	200139Z	18.4N 70.6E	SAT				(12.0/2.0 / / HRS)		PCN 3 UMSP								
4	200446Z	18.8N 70.6E	SAT				(1R DATA		PCN 3 UMSP								
5	201455Z	19.1N 69.1E	SAT				(1R DATA		PCN 5 UMSP								
6	210454Z	19.5N 68.3E	SAT				(13.0/3.0 /01.0/26HRS)		PCN 3 UMSP								
7	210455Z	19.2N 68.5E	SAT				(14.0/4.0 /01.5/25HRS)		NOAA-4								(CONF 01)
8	210727Z	19.7N 68.1E	SAT				(1R DATA		PCN 1 UMSP								
9	211422Z	19.9N 68.2E	SAT				(1R DATA		PCN 1 UMSP								
10	211450Z	20.2N 68.4E	SAT				(1R DATA		NOAA-4								(CONF 01)
11	211436Z	20.2N 68.3E	SAT				(15.0/5.0 /02.0/24HRS)		PCN 1 UMSP								
12	220446Z	20.3N 68.9E	SAT				(15.0/5.0 /01.0/23HRS)		NOAA-4								(CONF 01)
13	220446Z	20.3N 69.0E	SAT				(1R DATA		NOAA-4								(CONF 02)
14	221451Z	21.2N 69.5E	SAT				(1R DATA		NOAA-4								

FIX POSITIONS FOR TROPICAL CYCLONE NO. 29-75
2000Z 07 NOV TO 0600Z 12 NOV

FIX NO.	TIME	POSIT	FIX CAT	ACCHY NAV-MET	FIX LVL	FLT DIR	MAX OBS VEL	MAX OBS WIND HRG	SFC WIND HRG	UBS SLP	MIN MGT	FLT TI/TO	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF RADAR	MSN NMHR
1	060224Z	12.8N 88.9E	SAT				(11.5/1.5 / / HRS)		PCN 5 UMSP								
2	060322Z	11.2N 89.7E	SAT				(11.0/1.0 /00.5/24HRS)		NOAA-4								(CONF 01)
3	061405Z	12.2N 86.6E	SAT				(1R DATA		PCN 6 UMSP								
4	061409Z	13.2N 87.5E	SAT				(1R DATA		NOAA-4								(CONF 02)
5	070427Z	13.2N 85.1E	SAT				(11.0/1.0 /5 /25HRS)		NOAA-4								(CONF 01)
6	071410Z	14.1N 83.8E	SAT				(1R DATA		PCN 5 UMSP								
7	071433Z	14.7N 83.0E	SAT				(1R DATA		NOAA-4								(CONF 01)
8	080228Z	15.1N 82.5E	SAT				(13.0/3.0 /02.0/24HRS)		NOAA-4								(CONF 02)
9	080429Z	15.2N 81.5E	SAT				(13.0/3.0 /01.5/24HRS)		PCN 5 UMSP								
10	081458Z	16.2N 82.0E	SAT				(1R DATA		PCN 5 UMSP								
11	090101Z	18.2N 83.4E	SAT				(14.0/4.0 /01.0/24HRS)		PCN 5 UMSP								
12	090410Z	18.3N 84.0E	SAT				(1R DATA		PCN 6 UMSP								
13	100452Z	18.6N 87.3E	SAT				(12.5/3.5 /01.5/24HRS)		PCN 5 UMSP								
14	101434Z	19.2N 89.0E	SAT				(1R DATA		PCN 5 UMSP								
15	110437Z	22.3N 91.3E	SAT				(13.0/3.0 /00.5/22HRS)		PCN 5 UMSP								
16	111421Z	22.8N 91.4E	SAT				(1R DATA		PCN 5 UMSP								
17	120415Z	22.2N 92.0E	SAT				(11.0/2.0 /02.0/26HRS)		PCN 5 UMSP								

FIX POSITIONS FOR TROPICAL CYCLONE NO. 33-75
0000Z 25 NOV TO 0000Z 01 DEC

FIX NO.	TIME	POSN	FIX CAT	ACCHY	FIX LVL	FLT DIR	LVL VEL	WT+D	MAX OBS SFC WIND	UBS MIN SLP	MIN 700MH MGT	FIT LVL TI/TO	EYE FORM	ORIENT- TATION	EYE DIA	POSIT OF HAUAK	MSN NMHH
1	240334Z	11.3N	84.4E	SAT	(T1.5/1.5 / / HRS)				PCN 3 DMSP								
2	240432Z	10.7N	86.0E	SAT	(T1.5/1.5 /U1.0/24HRS)				NOAA-4								(CONF 01)
3	241408Z	10.3N	84.6E	SAT	(IN DATA)				PCN 5 DMSP								
4	241424Z	12.4N	82.3E	SAT	(IN DATA)				NOAA-4								(CONF 01)
5	250112Z	12.1N	84.5E	SAT	(T1.5/1.5 /S /22HRS)				PCN 5 DMSP								
6	250432Z	12.5N	88.0E	SAT	(T2.0/2.0-/U0.5/23HRS)				NOAA-4								(CONF 02)
7	250421Z	12.3N	85.6E	SAT	(IN DATA)				PCN 6 DMSP								
8	251456Z	12.6N	82.2E	SAT	(IN DATA)				PCN 5 DMSP								
9	251518Z	12.5N	80.8E	SAT	(IN DATA)				NOAA-4								(CONF 02)
10	260100Z	12.7N	80.6E	SAT	(T2.0/2.0 /U0.5/24HRS)				PCN 6 DMSP								
11	260302Z	11.9N	80.4E	SAT	(IN DATA)				PCN 3 DMSP								
12	260330Z	11.9N	88.1E	SAT	(T2.0/2.0-/S /23HRS)				NOAA-4								(CONF 02)
13	261419Z	15.4N	79.3E	SAT	(IN DATA)				NOAA-4								(CONF 02)
14	270047Z	14.0N	80.5E	SAT	(T2.0/2.0 /S /24HRS)				PCN 5 DMSP								
15	270238Z	13.8N	82.1E	SAT	(T2.0/2.0 /S /23HRS)				NOAA-4								(CONF 02)
16	270446Z	13.6N	82.3E	SAT	(IN DATA)				PCN 3 DMSP								
17	271514Z	15.3N	81.0E	SAT	(IN DATA)				NOAA-4								(CONF 01)
18	280431Z	14.0N	87.0E	SAT	(T1.0/2.0 /W1.0/25HRS)				NOAA-4								(CONF 03)
19	281452Z	15.5N	87.0E	SAT	(IN DATA)				NOAA-4								(CONF 01)
20	290233Z	14.1N	86.3E	SAT	(T2.5/2.5 /U1.5/23HRS)				NOAA-4								(CONF 01)
21	290711Z	13.2N	88.9E	SAT	(T2.0/2.0 / / HRS)				PCN 5 DMSP								
22	291510Z	14.0N	85.9E	SAT	(IN DATA)				NOAA-4								(CONF 02)
23	300011Z	11.3N	87.8E	SAT	(T1.5/2.0 /W0.5/17HRS)				PCN 5 DMSP								
24	300153Z	11.3N	87.8E	SAT	(IN DATA)				PCN 5 DMSP								
25	300328Z	12.4N	87.7E	SAT	(T1.5/2.5 /W1.0/25HRS)				NOAA-4								(CONF 01)
26	301256Z	14.3N	86.2E	SAT	(IN DATA)				PCN 6 DMSP								
27	301404Z	14.3N	86.9E	SAT	(IN DATA)				NOAA-4								(CONF 02)
28	010141Z	15.0N	85.0E	SAT	(T1.5/1.5 /S /23HRS)				PCN 3 DMSP								
29	010228Z	14.7N	87.0E	SAT	(T1.5/1.5 /S /23HRS)				NOAA-4								(CONF 01)
30	010412Z	15.0N	85.9E	SAT	(IN DATA)				PCN 3 DMSP								
31	011405Z	16.4N	85.5E	SAT	(IN DATA)				NOAA-4								(CONF 02)
32	020322Z	14.7N	85.5E	SAT	(T1.5/1.5 /S /25HRS)				NOAA-4								(CONF 02)
33	021405Z	15.4N	84.5E	SAT	(IN DATA)				NOAA-4								(CONF 02)